SOV/137-58-7-14719

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 109 (USSR)

AUTHORS: Mirgalovskaya, M.S., Matkova, L.I., Strel'nikova, I.A., Komova, E.M.

TITLE: Production of Single Crystals of InSb and AlSb and Study of the Properties Thereof (Polucheniye monokristallov InSb i AlSb i izucheniye ikh svoystv)

PERIODICAL: Tr. 1-y Mezhvuzovsk. konferentsii po sovrem. tekhn. dielektrikov i poluprovodnikov. 1956 g. Leningrad, 1957, pp 163-169

ABSTRACT: A description is offered of a method of producing single crystals of the semiconducting chemical compounds InSb and AlSb. The single crystals were obtained by pulling in an inert gas atmosphere. The fact that the rods consisted of single crystals was determined visually by cleavage and by Laue diffraction pattern of the cleavage plane. Production of single crystals of InSb involved no particular difficulties. The InSb was purified by re-pulling. The resistance of the samples obtained was 0.01-0.014 ohm·cm, and the mobility of the holes was $2.1 \cdot 10^3$ cm^2/v sec. The InSb compound has no rectifying

Card 1/2

Production of Single Crystals of InSb and AlSb (cont.)

effect. Production of single crystals of AlSb by pulling from a melt is difficult, as an excess of >0.29% Al in the mix over the stoichiometric ratio leads to the formation of a second phase, and this speeded the corrosion of the compound in air. To produce a single-phase compound, it is necessary to hold it for a long time at high temperatures and to stir the melt. The single crystals of AlSb produced have p-type conductivity. The resistivity of the specimens is 0.03-0.4 ohm·cm, the reverse voltage is 3-4 v, attaining 12 v in individual samples, the rectification factor is 1600, the mobility of the holes 127 cm^2/v sec at $n_g = 1.2 \cdot 10^{18}$ cm^{-3}. When the compounds are purified by controlled recrystallization, the electrical resistivity of the specimens declines at the first passes, but increases in subsequent ones. The resistivity of the initial InSb polycrystal of InSb is 0.014 ohm·cm. The single crystal from the first pulling has a resistivity of 0.0008 ohm·cm, and a single crystal pulled twice has a resistance of 0.01-0.114 ohm·cm. The pulling rate is ~1.0 mm/min, the rotation of the crucible being a few revolutions per min. It was established that excess of a component over the stoichiometric ratio does not change the type of conductivity of these compounds. It is found that floating-zone refining of AlSb makes it possible to increase the resistivity of the specimens (to 20-200 ohm·cm) and to reduce the number of carriers by ~$1.75 \cdot 10^{14}$ cm^{-3}.

Card 2/2 1. Single crystals--Production 2. Single crystals--Properties

V.Kh.

KOMOVA, E.M.

137-58-2-3916

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 234 (USSR)

AUTHORS: Mirgalovskaya, M.S., Matkova, L.N., Komova, E.M.

TITLE: The Mg-Al-Mn System (Sistema Mg-Al-Mn)

PERIODICAL: Tr. In-ta metallurgii AN SSSR, 1957, Nr 2, pp 139-148

ABSTRACT: The Mg corner of the Mg-Al-Mn system was investigated by microscopic and x-ray methods, and by measurement of microhardness. It was established that the field of primary crystallization of α Mg borders the fields of crystallization of the λ phase (solution of Al in α Mn), the ξ phase of the Al-Mn system, and the γ phase of the Mg-Al systems. The position of the corresponding monovariant curves was defined. It is shown that addition of up to 1% Al increases the solubility of βMn and αMg by 4-9 times. The invariant points were found at 438.5° (~35% Al and 0.5% Mn) and at 438° (37.5% Al and 0.5% Mn). In the former, the liquid + $\lambda \rightleftarrows \alpha + \xi$ reaction occurs, and in the latter liquid + $\xi \rightleftarrows \alpha + \gamma$.

D.B.

Card 1/1

1. Aluminum-magnesium-manganese systems--Microscopic analysis
2. Aluminum-magnesium-manganese systems--X-ray analysis

POLONSKIY, T.M.; KOMOVA, E.M.

Effect of temperature on structure formation in $Fe(OH)_3$ and $Al(OH)_3$ gels. Dop. ta pov. L'viv. un. no.7 pt.3:218-221 '57. (MIRA 11:2)

(Iron hydroxide) (Aluminum hydroxide)

34709
S/137/62/000/002/056/14
A006/A101

18.1200

AUTHORS: Mirgalovskaya, M. S., Komova, E. M.

TITLE: On the interaction of tellurium with gallium antimonide

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 38, abstract 2G297 (V sb. "Vopr. metallurgii i fiz. poluprovodnikov", Moscow, AN SSSR, 1961, 138 - 144)

TEXT: To clear up problems connected with alloying of GaSb, the authors investigated the nature of its interaction with Te. GaSb specimens, prepared by alloying the initial components in evacuated quartz ampoules, were subjected to zonal cleaning in evacuated quartz tubes. After 10 passes of the molten zone, 15 - 20 mm wide, at 0.3 mm/min, ingots were obtained whose middle section contained Cu only in an amount of $<10^{-3}$%. The majority of admixtures (Mg, Sn, Al, Fe) had a distribution factor of >1 in GaSb. The material obtained after zonal cleaning had a p-type conductivity, $\rho \simeq 0.06 - 0.08$ ohm · cm; $R_x \simeq 40 - 60$ cm^3/k and $n \simeq 1.2 - 1.8 \cdot 10^{17}$ cm^{-3}. Maximum mobility at individual sections of the ingot was μ_p = 1,000 cm^2/v · sec. Material of highest purity after zonal cleaning was used to draw out single crystals by Chokhral'skiy's method carried out in

Card 1/2

On the interaction of...

S/137/62/000/002/056/144
A006/A101

argon atmosphere at a rate of 0.8 mm/min and 3 rmp crucible rotation. Single crystal plates cut out of the ingots obtained had $\rho \simeq 0.06 - 0.07$ ohm · cm, $R_x \simeq$ $\simeq 50 - 70$ cm^3/k, $\mu_p = 600 - 800$ cm^2/v · sec, and n $\simeq 1.3 \cdot 10^{17}$ cm^{-3}. GaSb specimens after alloying with Te in a quantity of 0.1% had n-type conductivity, $\rho =$ = 0.024 ohm · cm, $R_x \simeq 33$ cm^3/k, $\mu_n \simeq 1,170$ cm^2/v · sec and n $\simeq 2.2 \cdot 10^{17}$ cm^{-3}. To reveal the nature of interaction between GaSb and Te, the Ga-Sb-Te system was studied over the sections GaSb-Te; GaSb-Ga_2Te_3; GaSb-GaTe and GaTe-Sb. The investigation was carried out by the method of microstructural, thermal and X-ray analyses. Simultaneously microhardness of the phases was studied. The presence of two quasi-binary eutectic type sections was established, namely: GaTe-Sb (7% GaTe, $t_{eut} = 590°C$) and GaSb-GaTe (14% GaTe, $t_{eut} = 695°C$). In the second system there is a zone of GaTe solid solution in GaSb, extending up to 16.4% GaTe and including a portion of alloys of section GaSb-Ga_2Te_3. Thus in the alloying of GaSb with tellurium an equilibrium is observed between GaSb and GaTe which form solid solutions of some spread in the ternary system.

A. Nashel'skiy

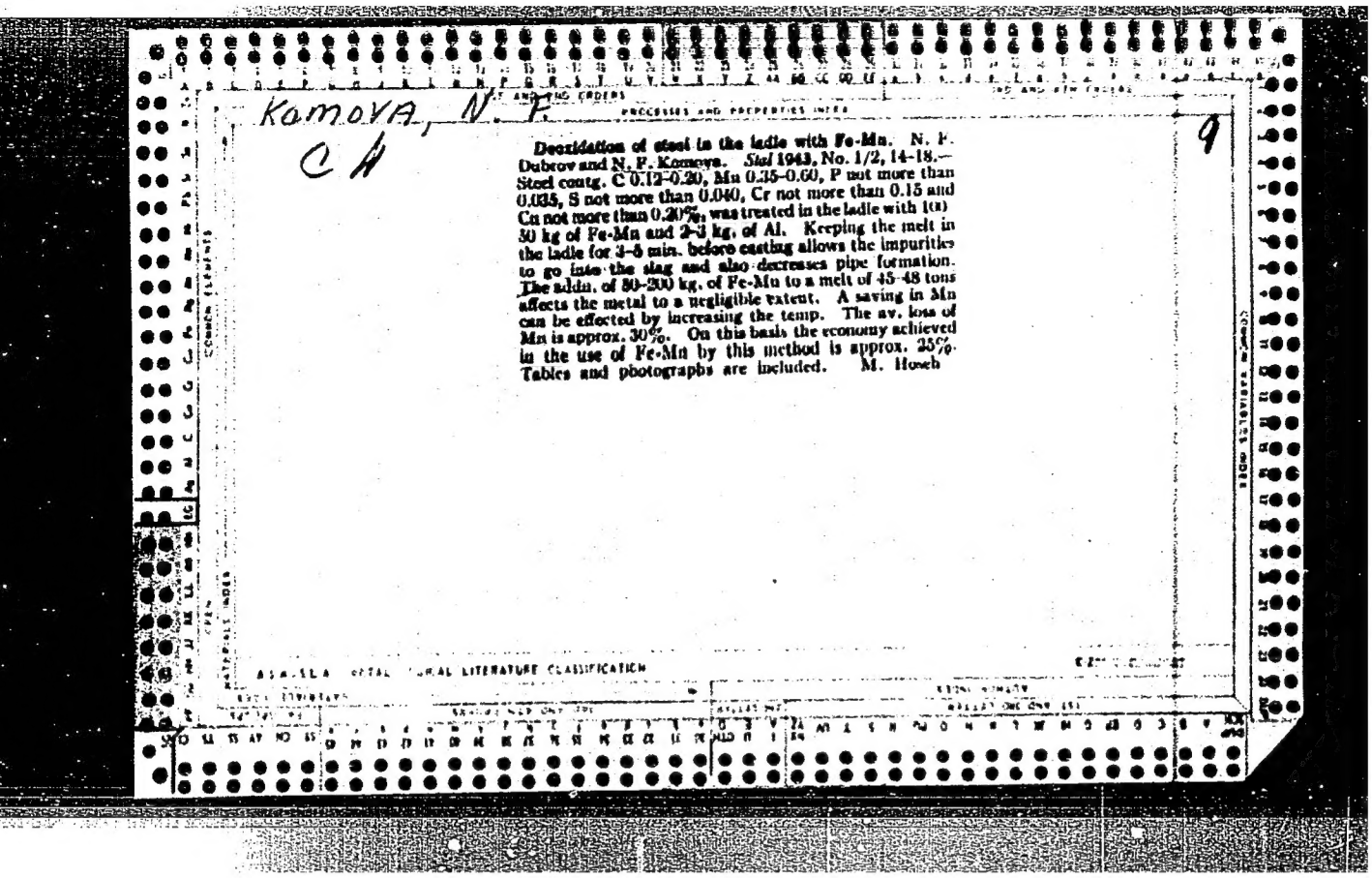
[Abstracter's note: Complete translation]

Card 2/2

ZABOLOTNYY, I.I.; KOMOVA, E.M.

Exchange of experience. Zav.lab. 28 no.8:1012 '62. (MIRA 15:11)

1. Ukrainskiy poligraficheskiy institut imeni I.Fedorova.
(Scientific apparatus and instruments)

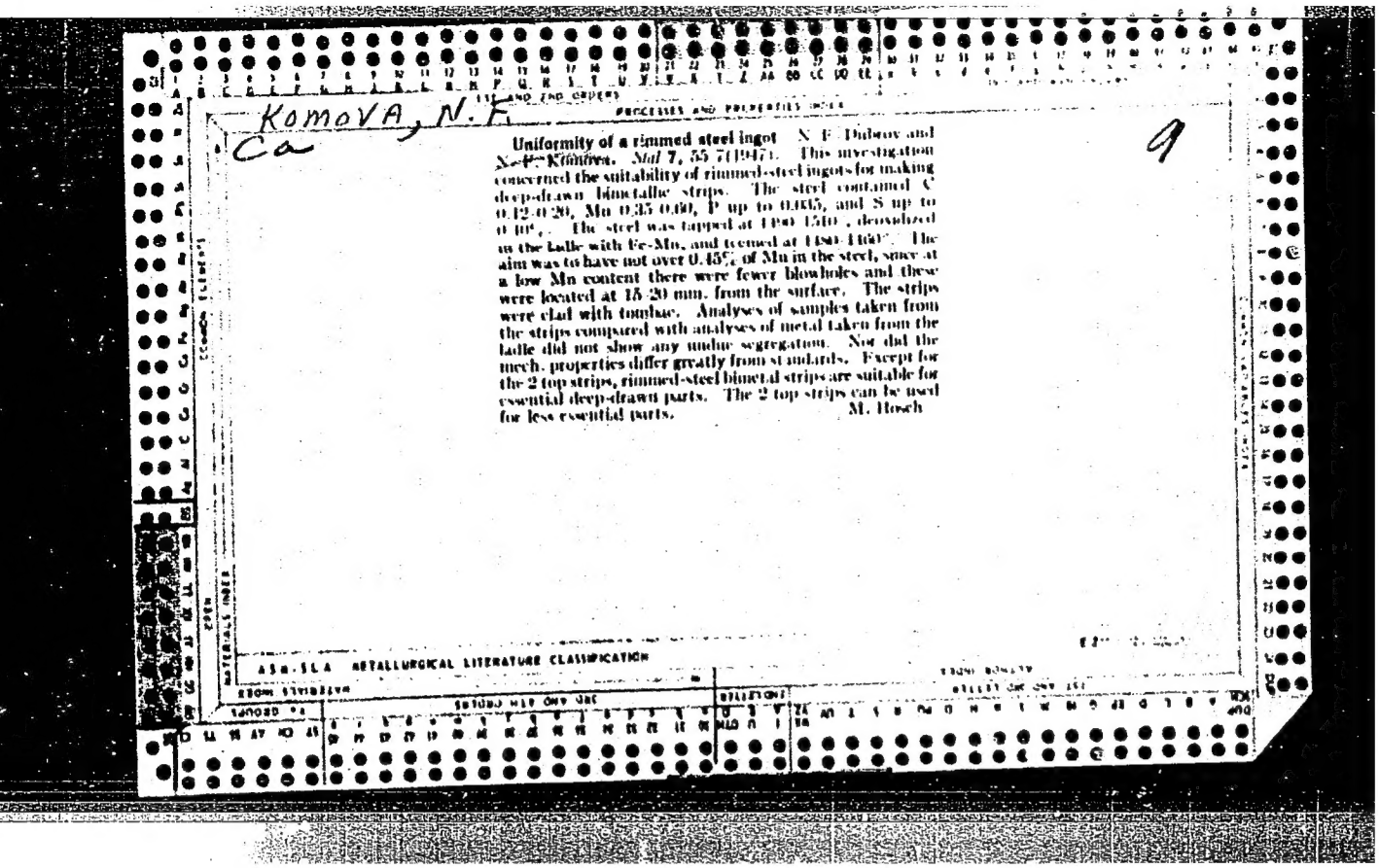


Komova, N. F.

CH

9

Decxidation of steel in the ladle with Fe-Mn. N. F. Dubrov and N. F. Komova. *Stal* 1943, No. 1/2, 14-18.—Steel contg. C 0.12-0.20, Mn 0.35-0.60, P not more than 0.035, S not more than 0.040, Cr not more than 0.15 and Cu not more than 0.20%, was treated in the ladle with 1(a) 30 kg of Fe-Mn and 2-3 kg. of Al. Keeping the melt in the ladle for 3-5 min. before casting allows the impurities to go into the slag and also decreases pipe formation. The addn. of 80-200 kg. of Fe-Mn to a melt of 45-48 tons affects the metal to a negligible extent. A saving in Mn can be effected by increasing the temp. The av. loss of Mn is approx. 30%. On this basis the economy achieved in the use of Fe-Mn by this method is approx. 25%. Tables and photographs are included. M. Hoseb



KOMOVA, N.F.
Ca

9

Uniformity of a rimmed steel ingot N. F. Dubrov and ~~N. F.~~ Komova. *Stal* 7, 55-7 (1947). This investigation concerned the suitability of rimmed-steel ingots for making deep-drawn bimetallic strips. The steel contained C 0.12-0.20, Mn 0.35-0.60, P up to 0.035, and S up to 0.05%. The steel was tapped at 1580-1610°, desoxidized in the ladle with Fe-Mn, and teemed at 1480-1490°. The aim was to have not over 0.45% of Mn in the steel, since at a low Mn content there were fewer blowholes and these were located at 15-20 mm. from the surface. The strips were clad with tombac. Analyses of samples taken from the strips compared with analyses of metal taken from the ladle did not show any undue segregation. Nor did the mech. properties differ greatly from standards. Except for the 2 top strips, rimmed-steel bimetal strips are suitable for essential deep-drawn parts. The 2 top strips can be used for less essential parts. M. Hosch

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

18.5100

75961
SOV/133-59-10-22/39

AUTHORS: Suyarov, D. I., Glushkov, A. I., Komova, N. F.

TITLE: Improvements of Surface Quality of Sheets in Pack Rolling

PERIODICAL: Stal', 1959, Nr 10, pp 923-925 (USSR)

ABSTRACT: Investigations conducted by Bel'chenko, G. I., and Ivanov, S. N. [Ref 1, Stal', 1955, Nr 2] on the mechanisms of the formation of local projections on the rolls which pick up metal particles causing subsequent sheet defects are of some interest, although the authors repudiate some of the statements. Based on an improvement adopted in England [Ref 2, Mort, I., "Iron and Steel"], bottom rolls at Lys'va Plant (Lys'venskiy zavod) are provided with 0.30- to 0.35-mm high collars to eliminate the contact of roll surfaces, which according to Bel'chenko and Ivanov [Ref 1] cause the defects. The roll collars improve biting conditions and decrease the picking up of metal particles. At Lys'va Plant these local projections are removed by a continuous

Card 1/4

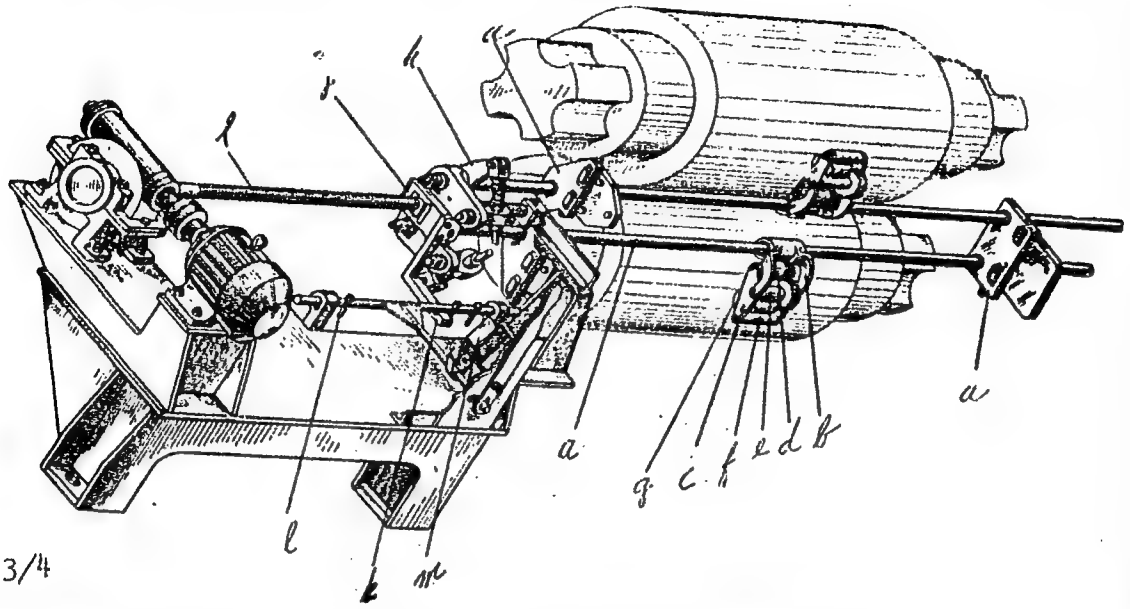
grinding attachment (see Fig. 2) which is endowed with the following features: (1) abrasive rolls which turn independently of the working rolls; (2) rods (a) which support carriage and (b) with abrasive rolls mounted in such a way as not to damage drive parts in case of their breaking down; and (3) abrasive dust removal by compressed air jet passed through hollow rods (a). The arrangement is recommended for introduction in other plants. There are 2 figures; and 5 references, 3 Soviet, 1 British, 1 U.S. The British reference is: Mort, I., Iron and Steel, 1958, Nr 10. The U.S. reference is: Griffith, Blast Furnace and Steel Plant, 1939, Nr 9.

(caption to Fig. 2--for which, see card 3/3)

Fig. 2. Continuous grinding attachment of the rolls during rolling: (a) rod; (b) carriage; (c) frame; (d) friction roll; (e) drive roll; (f) idle roll; (g) abrasive roll; (h) lever; (i) screw; (j) crossbeam; (k) arm; (l) stops; (m) switch; (n) planks.

Improvements of Surface Quality of Sheets in Pack Rolling
(see card 2/4 for caption to Fig. 2, below)

75961
SOV/133-59-10-22/39



Card 3/4

Improvements of Surface Quality of Sheets in Pack Rolling

73961
SOV/133-59-10-22/39

ASSOCIATION: Ural Institute of Ferrous Metals [illegible] Institute (Chermetch Metallov) and Lys'va [illegible] Plant (Lys'vonskiy metallurgicheskiy zavod)

Card 4/4

KOMOVA, O.

KOMOVA, O.

About those who "make" the weather. Rabotnitsa 35 no.9:14-15 S '57.
(MIRA 10:10)

1. Nachal'nik Byuro pogody Glavsevmorputi.
(Arctic regions--Meteorological stations) (Weather forecasting)

SOV/169-59-6-6155

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 6, p 110 (USSR)

AUTHOR: Komova, O.N.

TITLE: On the Advection of Heat in Winter in the Center of the Arctic Basin

PERIODICAL: V sb.: Probl. Severa. Nr 1, Moscow, AS USSR, 1958, pp 330-336

ABSTRACT: At the end of January 1957, the air temperature increased to -1°C over the station "North Pole Nr 5". It was established by a synoptic analysis of the atmospheric processes during this time that the presence of intense and prolonged advection of heat in the region of the North Pole is caused by the outflow of cyclones to north along the meridian of Spitsbergen. The comparison of the maximum temperatures observed in the past by the arctic stations shows that a similar intense advection is not abnormal.

Card 1/1

SHVARTS, A., kandidat na tekhnicheskite nauki; VESHNIKOV, A., inzh.; KOMOV, S.

On the rotor motors with internal combustion. Ratsionalizatsiia 11 no.9:13-17 '61.

1. Direktor na Vseuiuzniia nauchno-tekhnicheski institut pri Durzhavnata patentna ekspertiza(for Komov)

(Gas and oil engines)

PEREL'MAN, A.I.; MUSHINA, Ye.A.; TOPCHIYEV, A.V. [deceased]; Prinimali uchastiye: KOMOVA, T.A.; SHMONINA, V.L.

Investigating the polymerization of vinylcyclohexane on the catalytic systems $Al(i\text{-}C_4H_9+TiCl_4)$. Plast. massy no.8:3-6 '64.

KOMOVA,T.P.

KOMOVA,T.P. (g.Tushino Moskovskoy oblasti)

Our experience in conducting extracurricular work in chemistry. Khim. v shkole 10 no.5:60-64 S-O '55. (MLRA 8:11)
(Chemistry--Study and teaching)

KOMOVA, T.P. (Tushino Moskovskoy oblasti)

Notebooks on chemistry. Khim.v shkole 11 no.5:69-70 S-O '56.
(Chemistry--Study and teaching) (MLRA 9:11)

KOMOVA, T.P. (g. Tushino).

Relationship between teaching chemistry and biology. Khim. v shkole 12 no.3:61-67 My-Je '57. (MLRA 10:6)
(Chemistry--Study and teaching)
(Biology--Study and teaching)

KOMOVA, T.P. (selo Bratteevo Moskovskoy oblasti)

To the young teachers. Khim.v shkole 15 no.1:77-80
Ja-F '60. (MIRA 13:5)
(Chemistry--Study and teaching)

KOMOVA, Ye.I.

Course of rheumatic fever in children. Zdrav. Belor. 6 no.3:29-32 Mr '60. (MIRA 13:5)

1. Iz Minskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach G.A. TSgoyev, rukovoditel' raboty - doktor meditsinskikh nauk A.S. Levin).

(RHEUMATIC FEVER)

KOMOVA, Z. A.

"Stimulating Therapy of Chronic Dysentery in Young Children." Cand Med Sci, Gor'kiy State Medical Inst imeni S. M. Kirov, Gor'kiy, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

KOMOVA, Z. A. KOMOVA, Z. A. FD 130

USSR/Medicine - Dysentery

Card 1/1

Author : Komova, Z. A.

Title : The use of Prof. V. A. Chernokhvostov's vaccine in the treatment of dysentery (an analysis of the immediate results of vaccine therapy in the light of the study of the dynamics of certain reactivity indexes)

Periodical : Zhur. mikrobiol. epid. i immun. 4, 39-40, Apr 1954

Abstract : Conditions which preclude, and indexes which may predict the successful treatment of dysentery with Chernokhvostov's alcohol dysentery vaccine are discussed. No references are cited.

Institution : Gor'kiy Medical Institute im S.M. Kirov (Director-Docent N. N. Mizinov)

Submitted : December 22, 1953

KOMOVA, Z.A., ERGLOVA, I.K.

Detection of antigens in the blood serum in Botkin's disease. Kaz. med.zhur. no.5:32-34 S-O'63 (MIRA 16:12)

1. Klinicheskoye otdeleniye Gor'kovskogo instituta epidemiologii i mikrobiologii (dir. I.N. Blokhina).

KOMOVA, Z. A., YEROFEYEVA, O. P., GORKIN, YE. N.

"Salmonelloses in adults."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

KOMOVA, Z.A.

Comparative evaluation of some laboratory methods for the diagnosis of aborted and anicteric forms of Botkin's disease. Vop.med.virus. no.9:360-362 '64. (MIRA 18:4)

1. Klinicheskoye otdeleniye Gor'kovskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii.

KOMOVA, Z.A.; NASONOVA, A.S.; BASHKIROVA, Ye.T.

Use of polymyxin in the treatment of dysentery in adults.
Antibiotiki 9 no.9:855-856 S '64. (MIRA 19:1)

1. Klinicheskoye otdeleniye Gor'kovskogo instituta epidemiologii i mikrobiologii i infektsionnyye bol'nitsy No.2 i No.23 goroda Gor'kogo.

IZYUMOV, V.N.; KOPOSOVA, T.L.; Prinimali uchastiye: KOMOVA, Z.P.; BUNTOVA, V.I.

Synthesis of alkyd resins modified by monobasic acids.
Lakokras. mat. i ikh prim. no.5:2-5 '63. (MIRA 16:11)

1. Yaroslavskiy tekhnologicheskiy institut.

SOLDATENKOV, P.F., prof., doktor biolog.nauk; FILATOVICH, V.V., kand. sel'skokhoz.nauk; KOMOVATOV, V.S.; BOYCHENKO, P.Ya..

Butterfat content of milk in Tagil cattle depending on the amount of fat and proteins in feed rations of growing calves. Agrobiologiia no.3:349-357 My-Je '59. (MIRA 12:9)

1. Sverdlovskiy sel'skokhozyaystvennyy institut.
(Calves--Feeding and feeds) (Milk)

USTINOVA, Ye.T.; USTINOVA, G.A.; KOMOVKINA, N.S.

Testing of new bonding substances for the manufacture of nonwoven fabrics for various purposes. Nauch.-issl.trudy TSNIIKHBI '60 [publ. '62]:196-208. (MIRA 18:2)

UKTINOVA, Ye.T.; SANDOMIRSKIY, D.M.; KONOVKINA, N.S.

Improved technology of the manufacture of nonwoven interlining fabrics. Nauch.-iss. trudy TSNIKHBI za 1962 g.:303-315 '64. (MIRA 18:8)

BYKHOVSKIY, A.V.; KOMOVNIKOV, G.S.; POLUSHKIN, B.V.

Effect of zymosan on the macrophagic reaction of the lungs and phagocytosis in acute radiation sickness. Vest. AMN SSSR 20 no.9:83-86 '65. (MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

KOMOVSKIY, A.

Projection printing. Sov. foto 19 no.5:35-40 My '59.
(MIRA 12:9)

(Photography--Printing processes)

KOMOVSKIY, A.

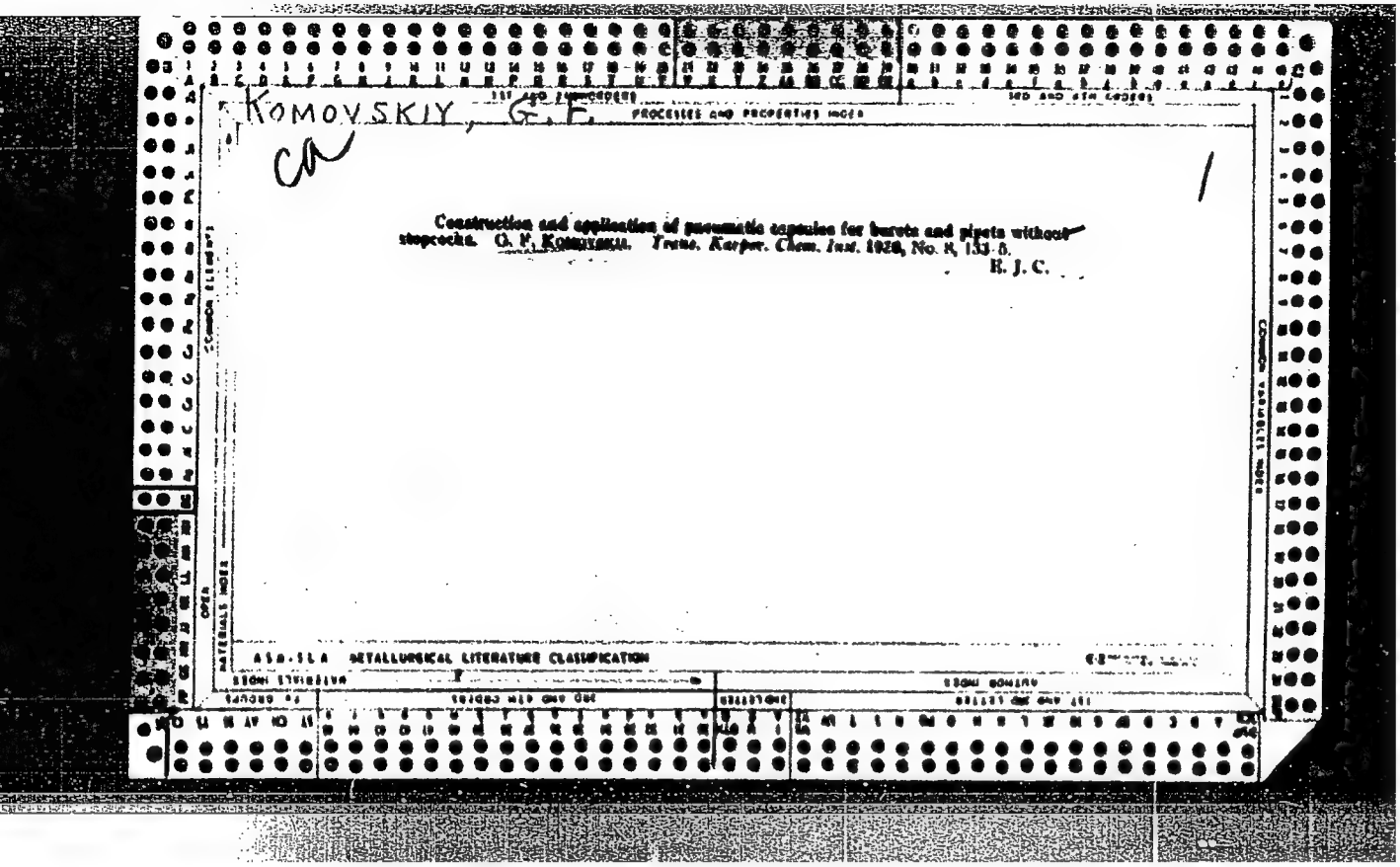
Preparing for a current exhibition. Sov. foto 19 no.6:50-51 Je '59. (MIRA 12:9)

(Photography--Exhibitions)

KOMOVSKIY, A.

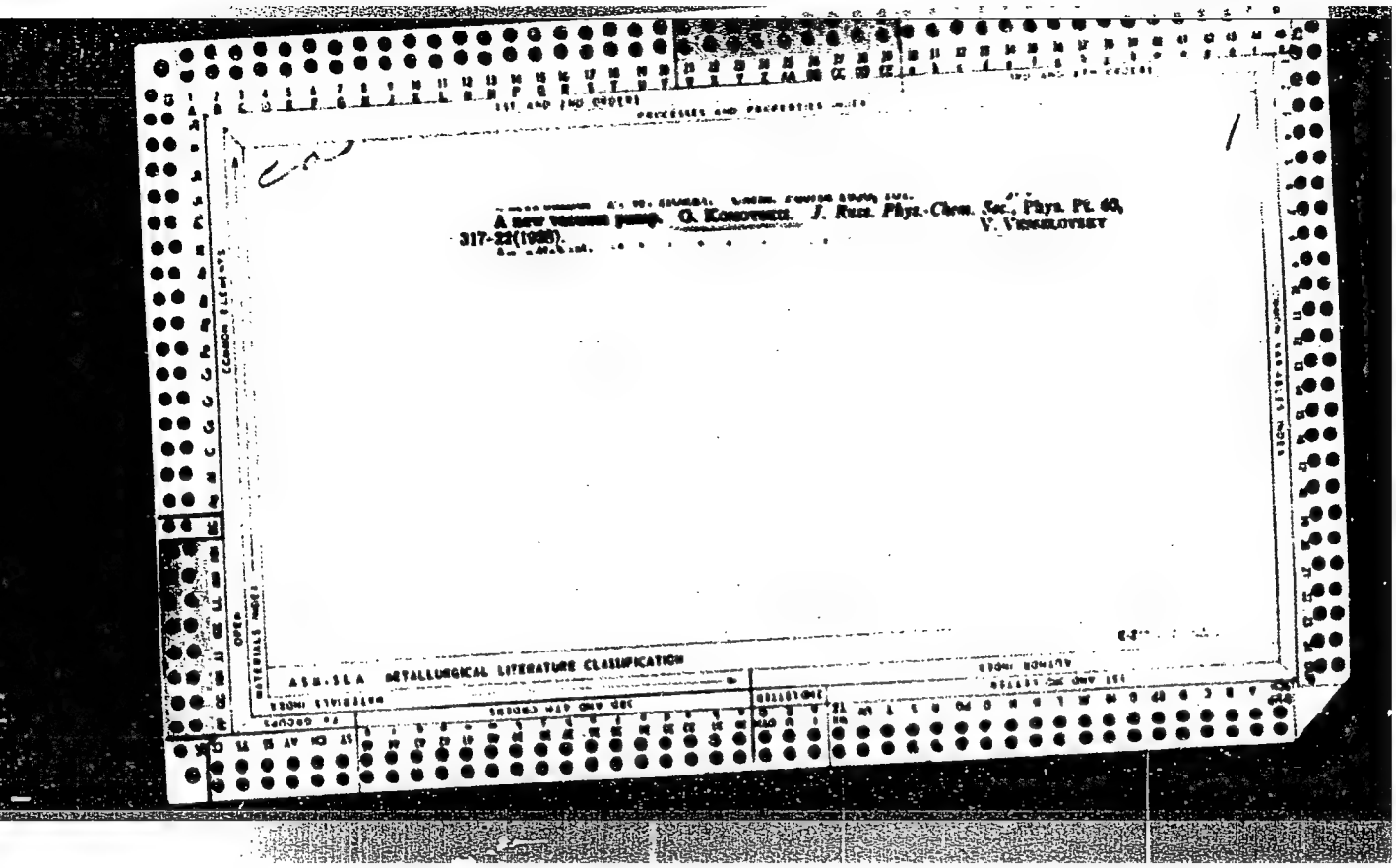
Through the window of an automobile. Sov.foto 19 no.7:68-69 Jl '59.
(MIRA 12:11)

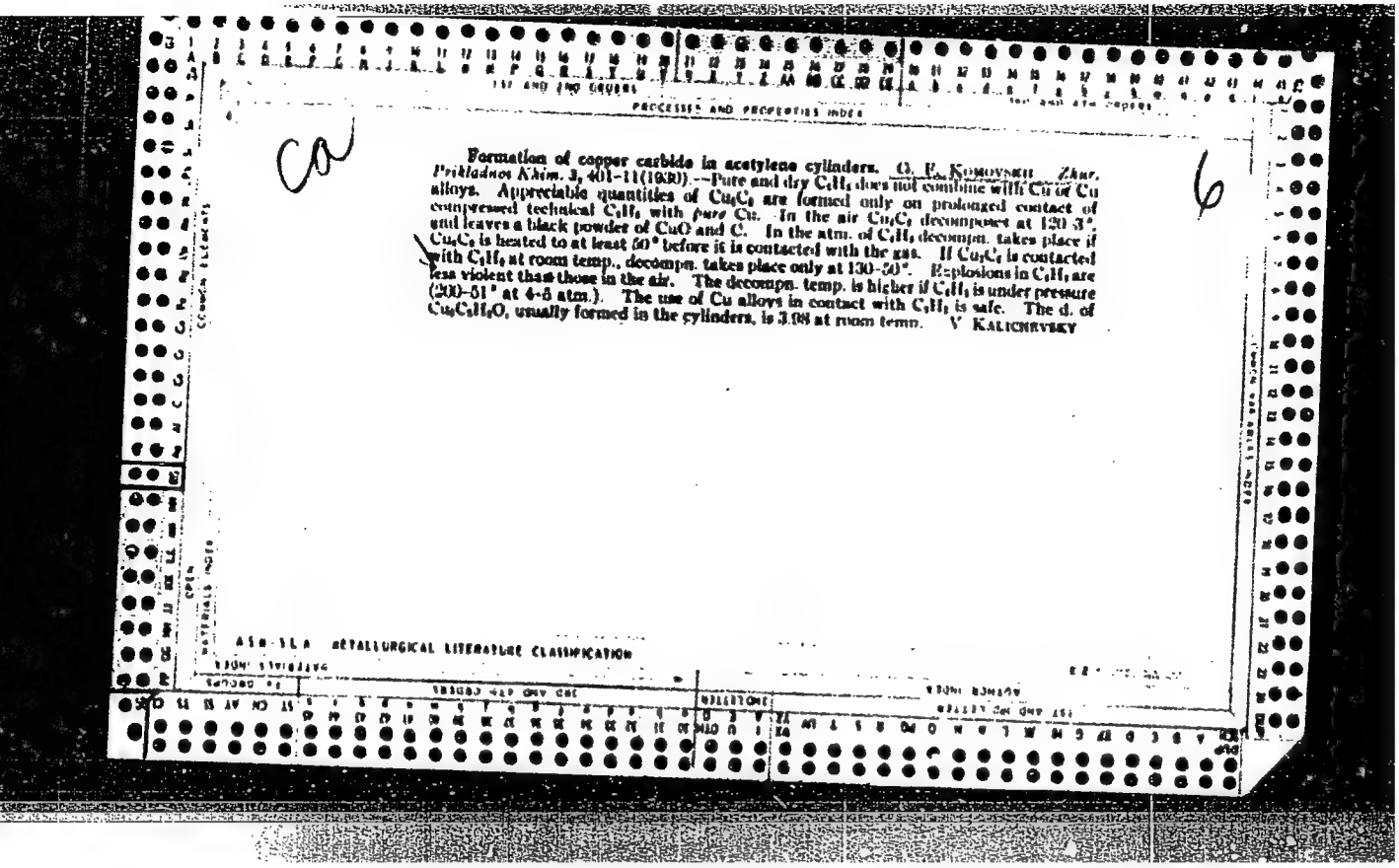
(Photography)



KOMOVSKIY, G. F.

Construction and application of pneumatic capsules for burets and pipets without stopcocks. O. F. Kozhevnikov. *Trans. Kazan. Chem. Inst.* 1928, No. 8, 133-8.
R. J. C.





PROCESSES AND PROPERTIES INDEX

Ca

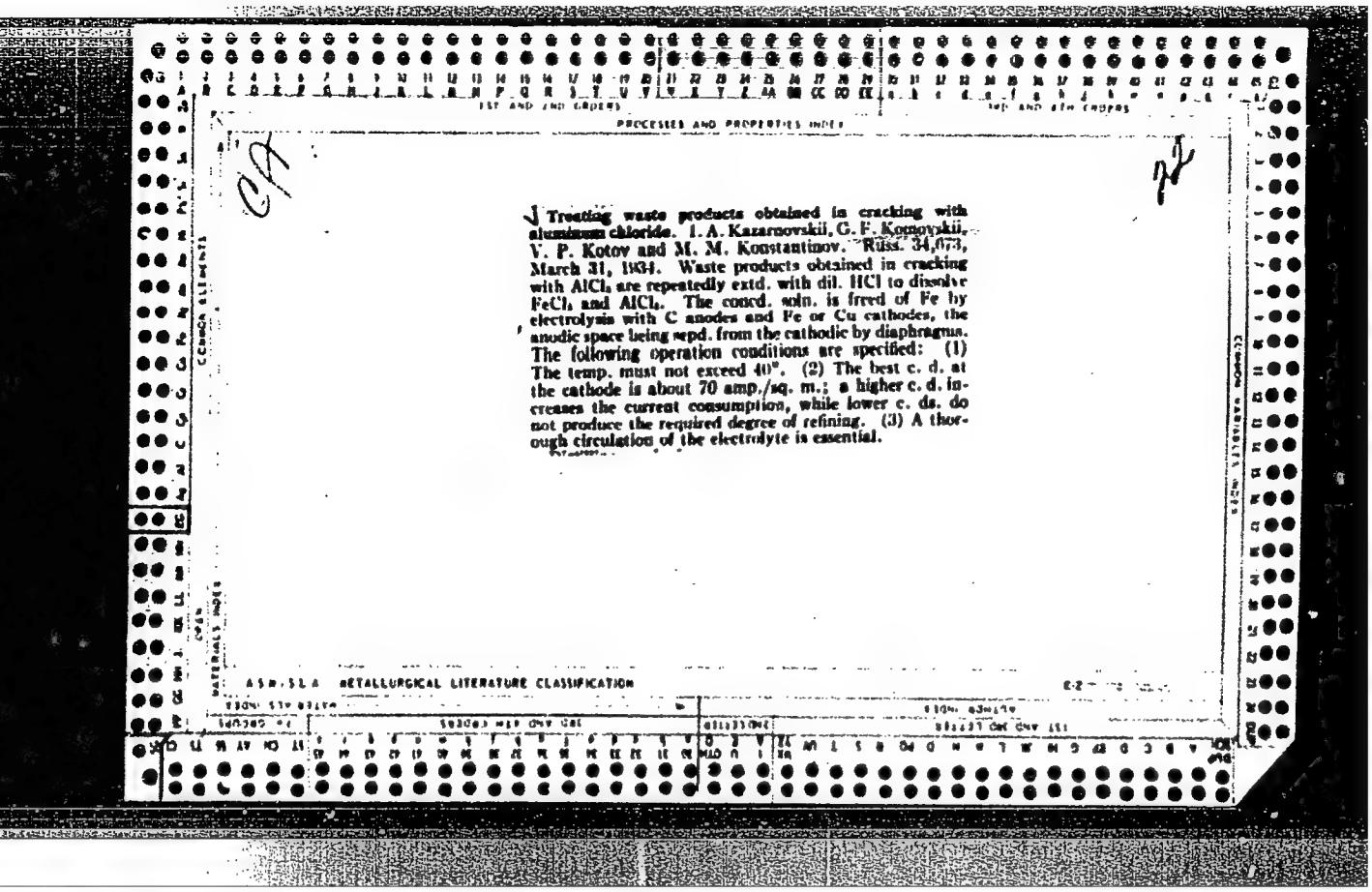
6

Formation of copper carbide in acetylene cylinders. O. E. Komovskii. *Zhur. Prikladnoi Khim.* 3, 401–11(1930).—Pure and dry C_2H_2 does not combine with Cu of Cu alloys. Appreciable quantities of Cu_2C_2 are formed only on prolonged contact of compressed technical C_2H_2 with *pure* Cu. In the air Cu_2C_2 decomposes at 120.3°, and leaves a black powder of CuO and C. In the atm. of C_2H_2 decompn. takes place if Cu_2C_2 is heated to at least 50° before it is contacted with the gas. If Cu_2C_2 is contacted with C_2H_2 at room temp., decompn. takes place only at 130–50°. Explosions in C_2H_2 are less violent than those in the air. The decompn. temp. is higher if C_2H_2 is under pressure (200–51° at 4–5 atm.). The use of Cu alloys in contact with C_2H_2 is safe. The d. of $Cu_2C_2H_2O$, usually formed in the cylinders, is 3.08 at room temp. V. Kalichevsky

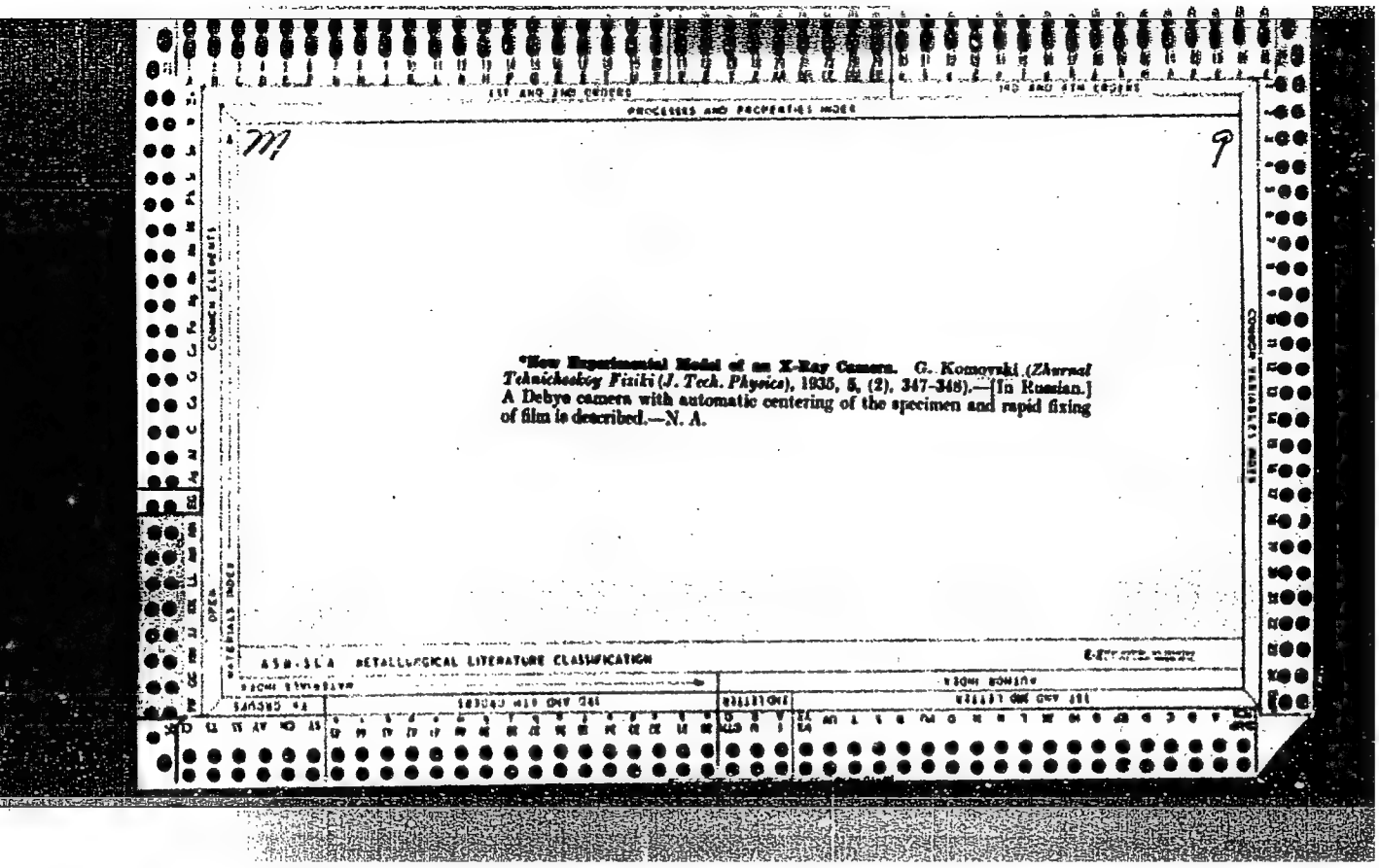
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Br. Ab. R E-n, Apparatus, etc.

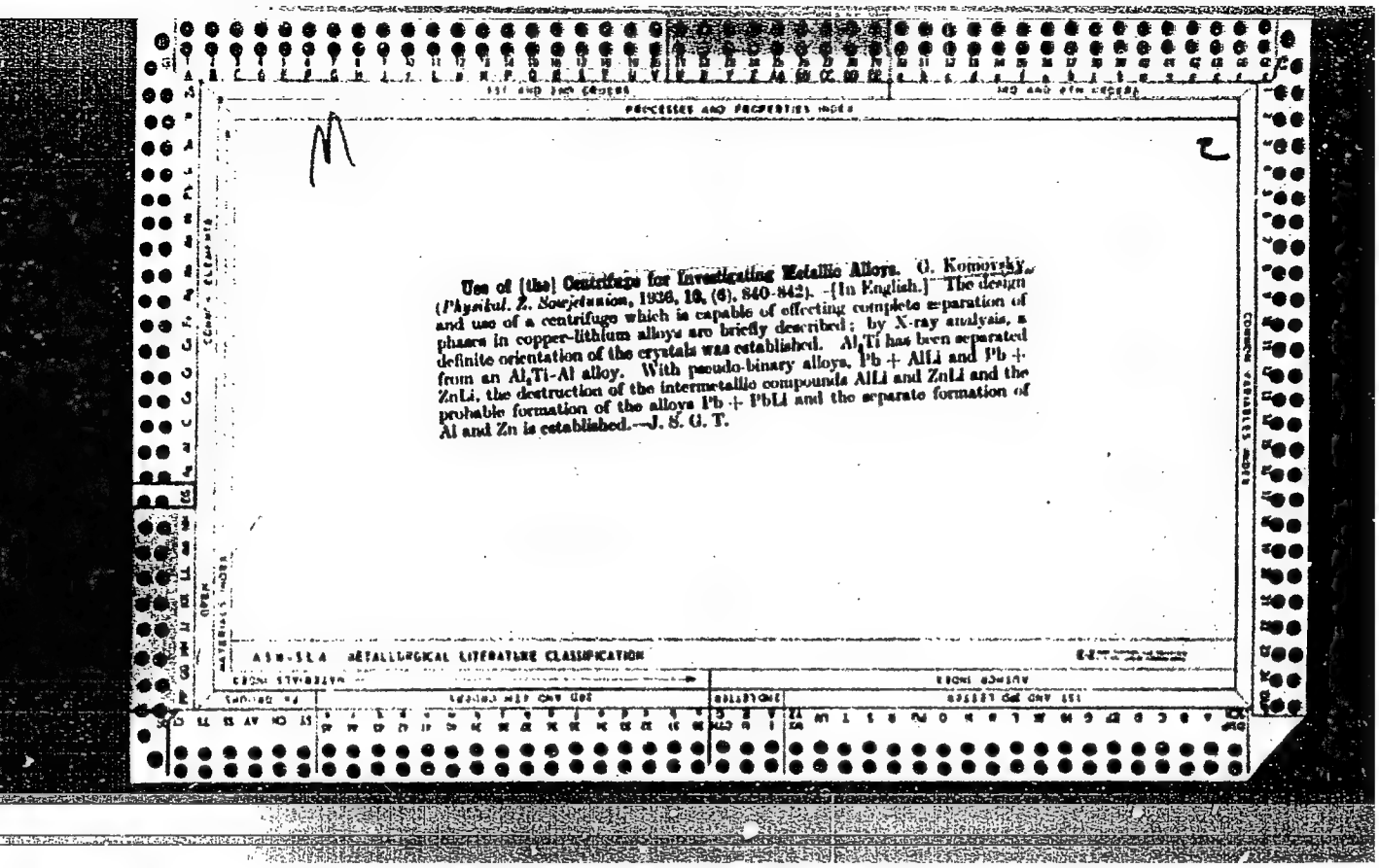
Apparatus for detecting luminescent ores. G. F. Komovski (Javod. Lab., 1931, 8, 514-516).—Ores are illuminated by a spark from a hand-operated magneto; scheelite, e.g., can be found in this way. For irradiation with cathode rays a portable hand pump giving a vac. of 5×10^{-3} mm. Hg is used. J. J. B.



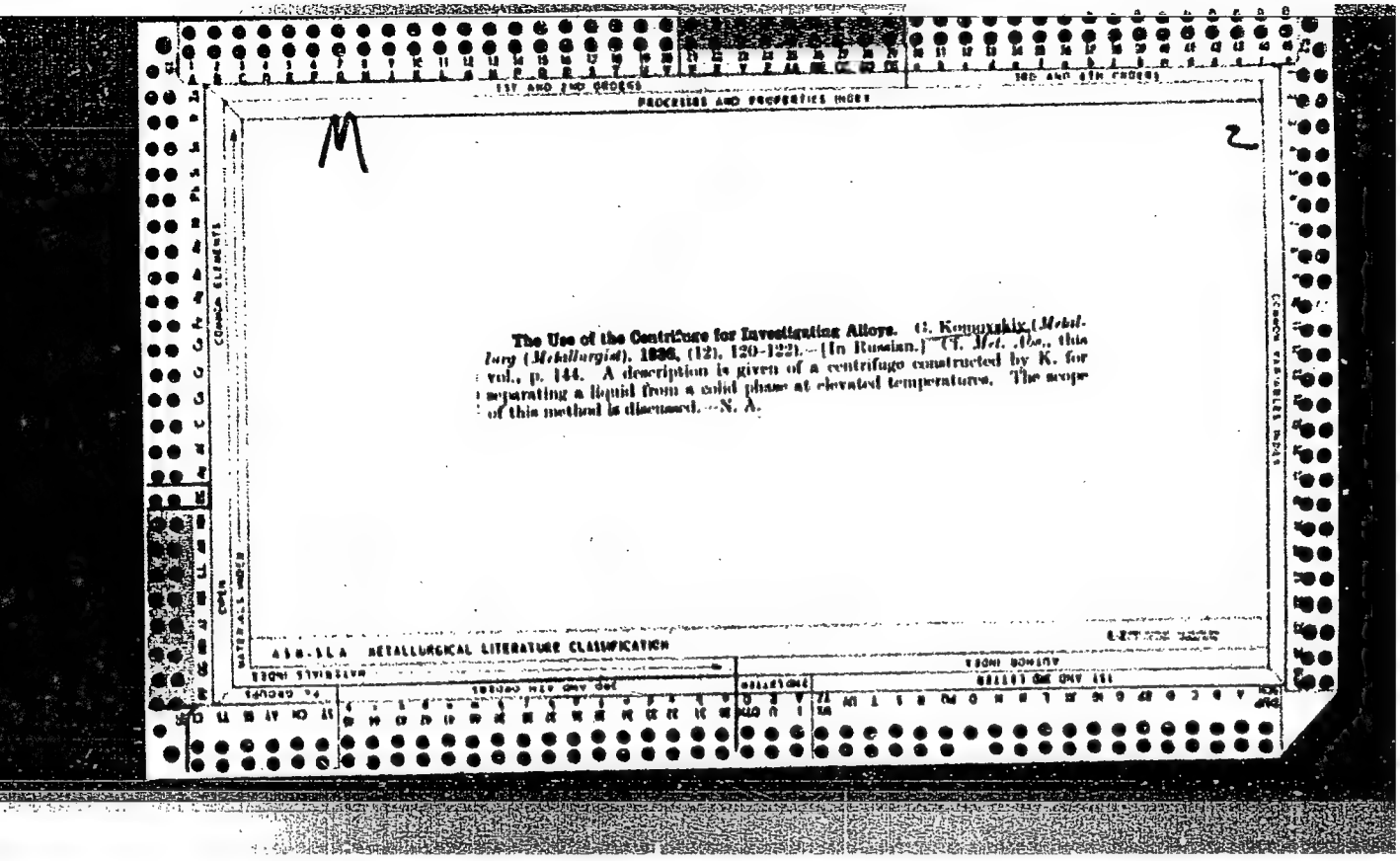
Treating waste products obtained in cracking with aluminum chloride. I. A. Kazarnovskii, G. F. Komoyskii, V. P. Kotov and M. M. Konstantinov. Russ. 34,073, March 31, 1934. Waste products obtained in cracking with $AlCl_3$ are repeatedly extd. with dil. HCl to dissolve $FeCl_3$ and $AlCl_3$. The concd. soln. is freed of Fe by electrolysis with C anodes and Fe or Cu cathodes, the anodic space being sepd. from the cathodic by diaphragms. The following operation conditions are specified: (1) The temp. must not exceed 40°. (2) The best c. d. at the cathode is about 70 amp./sq. m.; a higher c. d. increases the current consumption, while lower c. ds. do not produce the required degree of refining. (3) A thorough circulation of the electrolyte is essential.



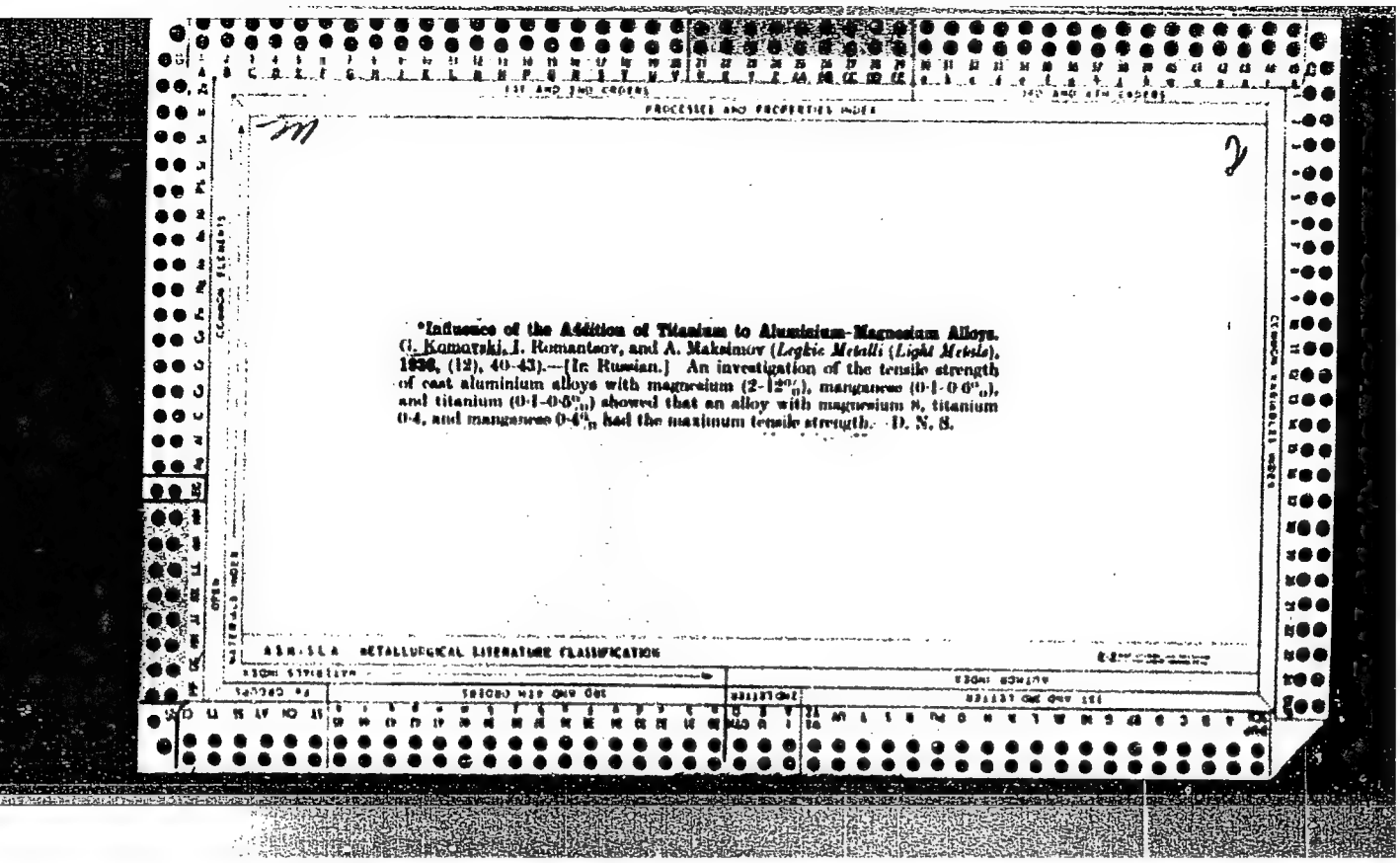
"New Experimental Model of an X-Ray Camera. G. Komovski. (*Zhurnal Tekhicheskoy Fiziki* (*J. Tech. Physics*), 1935, 5, (2), 347-348).—[In Russian.] A Debye camera with automatic centering of the specimen and rapid fixing of film is described.—N. A.



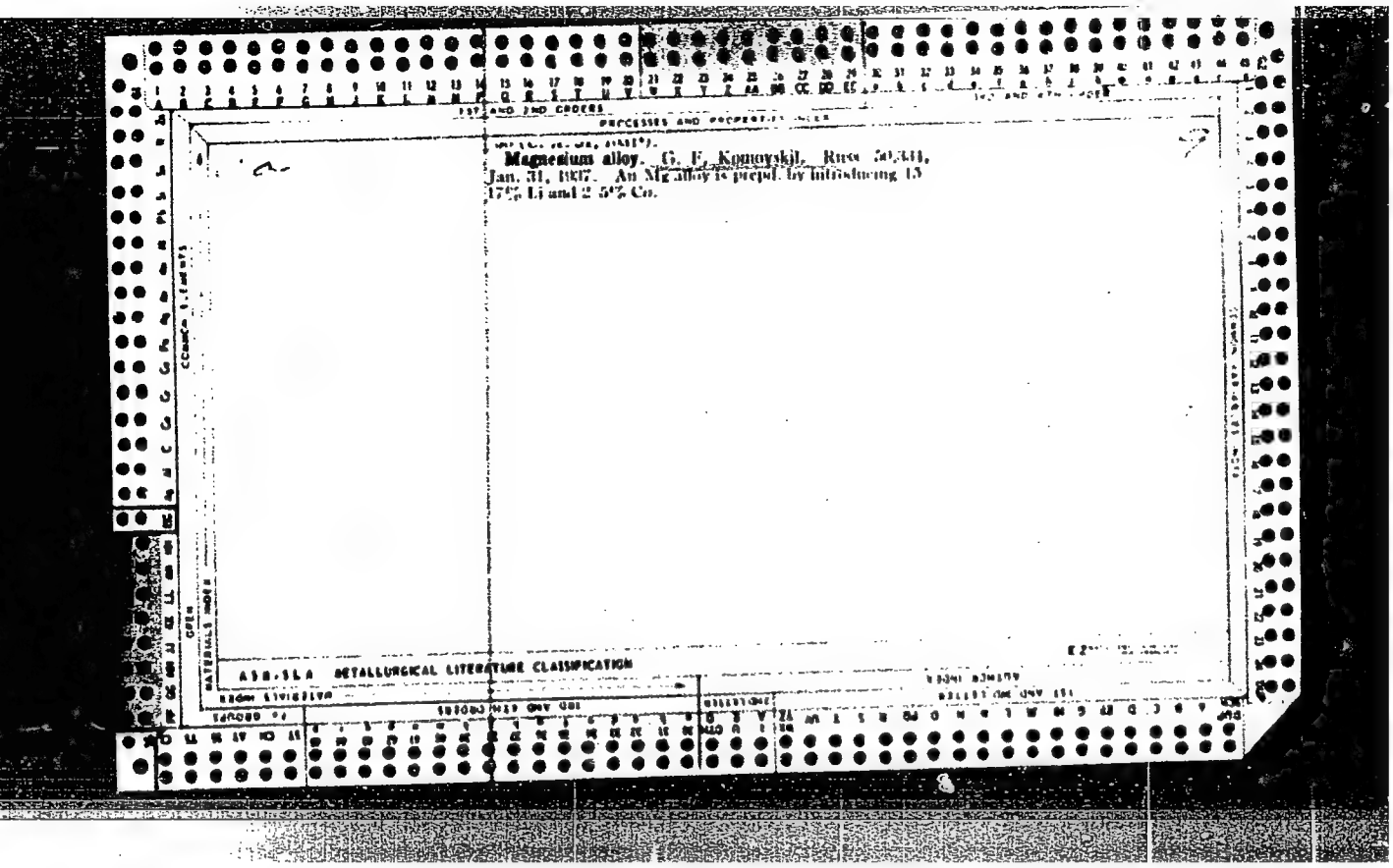
Use of [the] Centrifuge for Investigating Metallic Alloys. G. Komovsky. (*Physikal. Z. Sowjetunion*, 1936, **10**, (6), 840-842). -[In English.] The design and use of a centrifuge which is capable of effecting complete separation of phases in copper-lithium alloys are briefly described; by X-ray analysis, a definite orientation of the crystals was established. Al_4Ti has been separated from an Al_4Ti-Al alloy. With pseudo-binary alloys, Pb + AlLi and Pb + ZnLi, the destruction of the intermetallic compounds AlLi and ZnLi and the probable formation of the alloys Pb + PbLi and the separate formation of Al and Zn is established.—J. S. G. T.



The Use of the Centrifuge for Investigating Alloys. G. Kemmykhin (*Metallurgy* (*Metallurgist*), **1936**, (12), 120–122.—[In Russian.] (*Cf. Met. Abs.*, this vol., p. 144. A description is given of a centrifuge constructed by K. for separating a liquid from a solid phase at elevated temperatures. The scope of this method is discussed.—N. A.



*Influence of the Addition of Titanium to Aluminium-Magnesium Alloys. G. Komarski, I. Romantsov, and A. Maksimov (*Legkie Metalli* (*Light Metals*), 1938, (12), 40–43).—[In Russian.] An investigation of the tensile strength of cast aluminium alloys with magnesium (2-12%), manganese (0·1-0·6%), and titanium (0·1-0·5%) showed that an alloy with magnesium 8, titanium 0·4, and manganese 0·4% had the maximum tensile strength.—D. N. S.



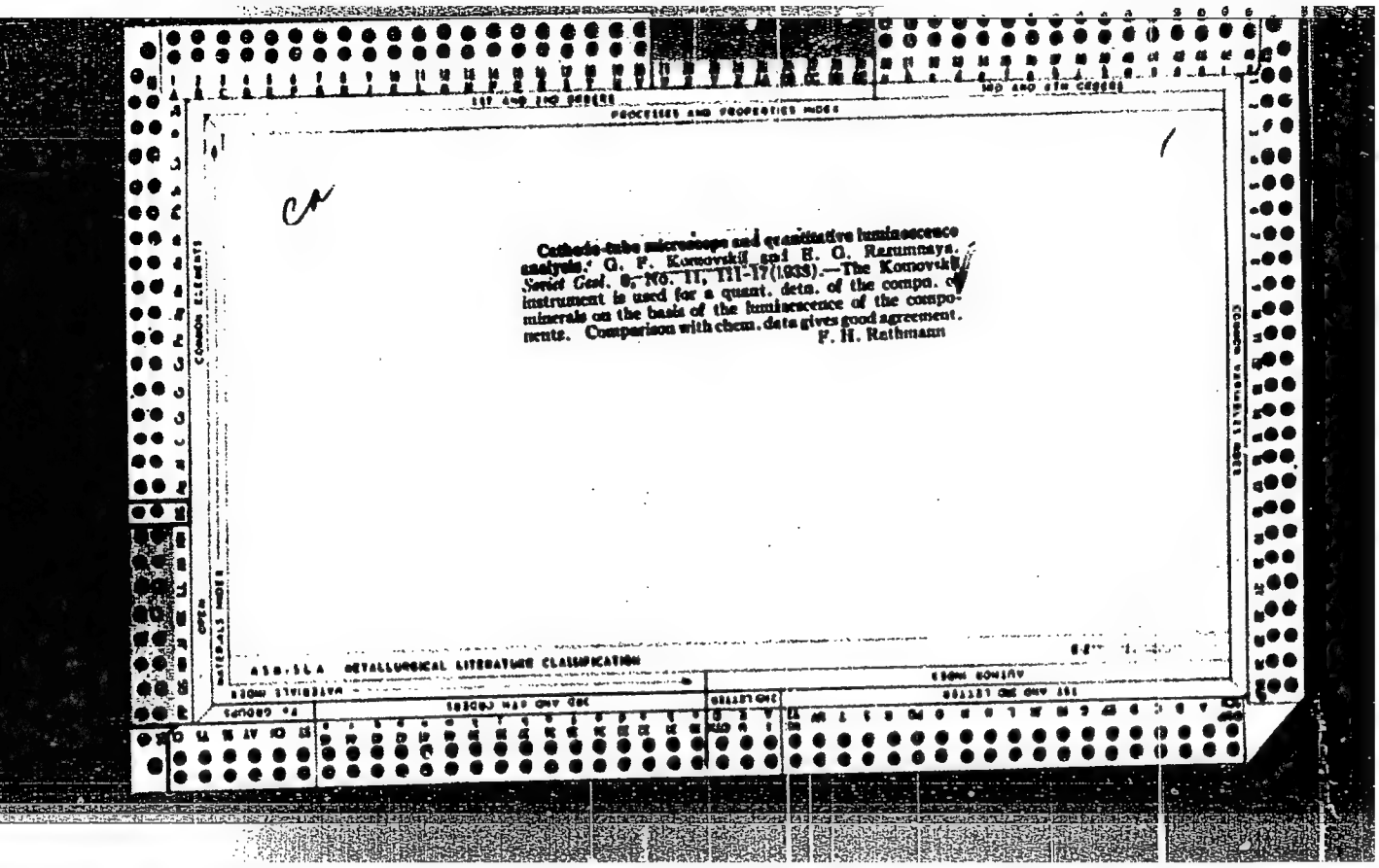
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

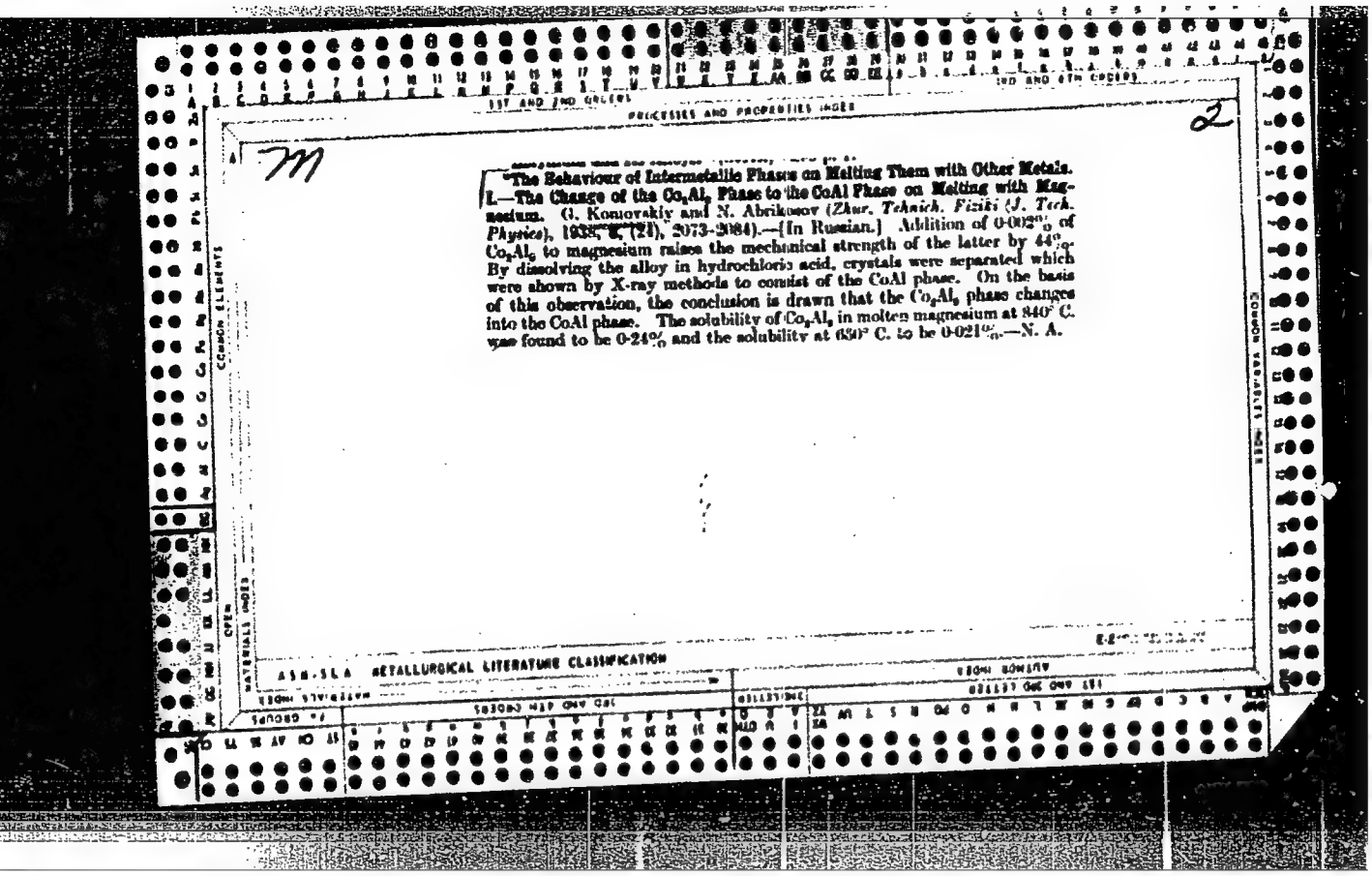
Ca

Luminescence of minerals and the apparatus for its investigation. O. Komovskii and F. Abolenskii. Sovet. Geol. 8, No. 4, 332-8(1939).—Luminescence is produced by irradiation with ultraviolet light. F. H. Rathmann

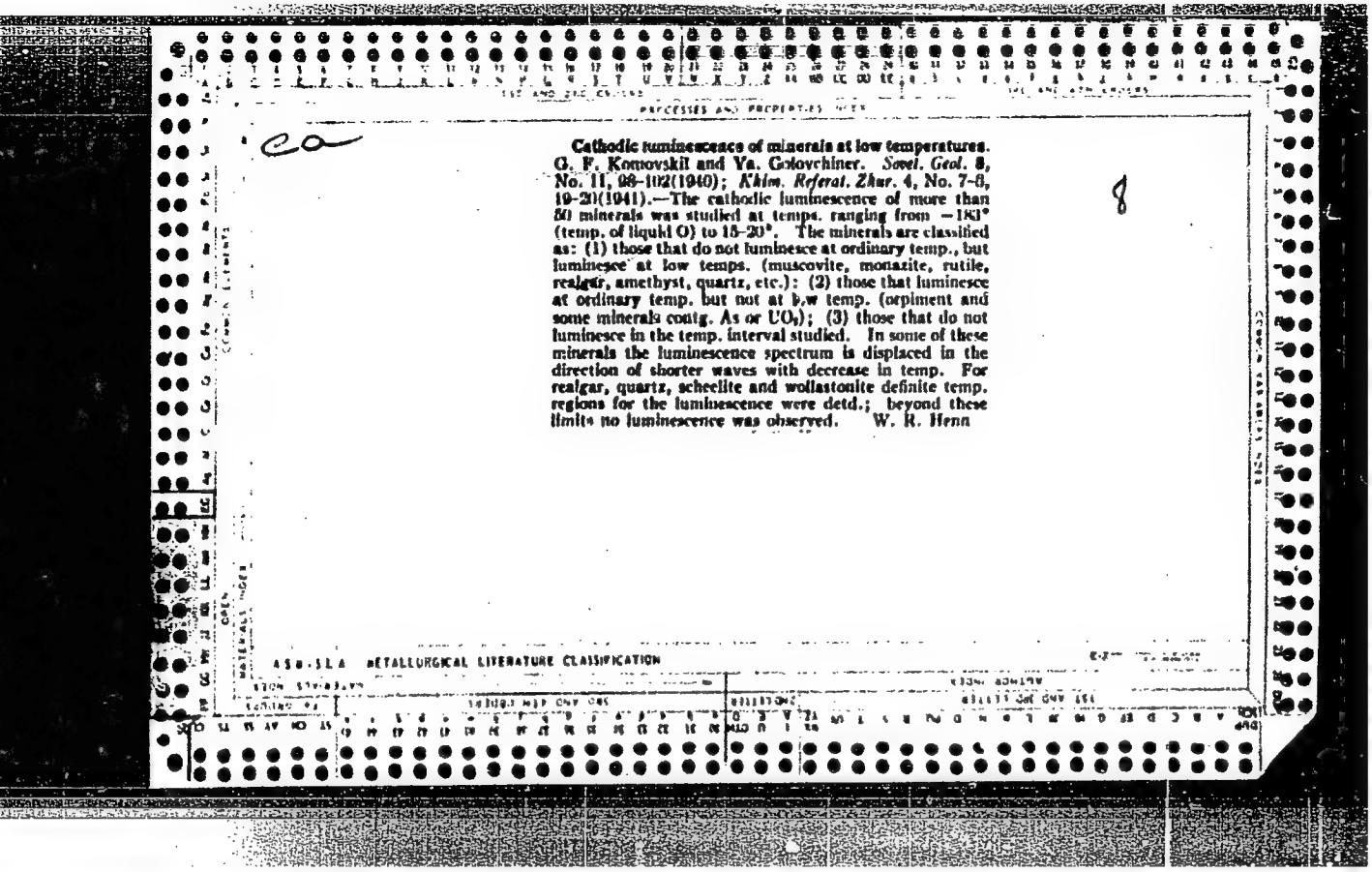
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Cathode-tube microscope and quantitative luminescence analysis. G. P. Kovovskiĭ and E. O. Rammaya. *Soviet Geol.* 8, No. 11, 111-17(1938).—The Kovovskiĭ instrument is used for a quant. detn. of the compn. of minerals on the basis of the luminescence of the components. Comparison with chem. data gives good agreement.
F. H. Rathmann



The Behaviour of Intermetallic Phases on Melting Them with Other Metals. I.—The Change of the Co_2Al_9 Phase to the CoAl Phase on Melting with Magnesium. G. Komovskiy and N. Abrikosov (*Zhur. Tekhnich. Fiziki* (*J. Tech. Physics*), 1938, **8**, (21), 2073-2084).—[In Russian.] Addition of 0·002% of Co_2Al_9 to magnesium raises the mechanical strength of the latter by 44%. By dissolving the alloy in hydrochloric acid, crystals were separated which were shown by X-ray methods to consist of the CoAl phase. On the basis of this observation, the conclusion is drawn that the Co_2Al_9 phase changes into the CoAl phase. The solubility of Co_2Al_9 in molten magnesium at 840° C. was found to be 0·24% and the solubility at 650° C. to be 0·021%.—N. A.



Ca

Cathodic luminescence of minerals at low temperatures. G. F. Komovskil and Ya. Golovchiner. *Sovet. Geol.* 8, No. 11, 98–102(1940); *Khim. Referat. Zhur.* 4, No. 7–8, 19–20(1941).—The cathodic luminescence of more than 50 minerals was studied at temps. ranging from −183° (temp. of liquid O) to 18–20°. The minerals are classified as: (1) those that do not luminesce at ordinary temp., but luminesce at low temps. (muscovite, monazite, rutile, realgar, amethyst, quartz, etc.); (2) those that luminesce at ordinary temp. but not at low temp. (orpiment and some minerals contg. As or UO_2); (3) those that do not luminesce in the temp. interval studied. In some of these minerals the luminescence spectrum is displaced in the direction of shorter waves with decrease in temp. For realgar, quartz, scheelite and wollastonite definite temp. regions for the luminescence were detd.; beyond these limits no luminescence was observed. W. R. Henn

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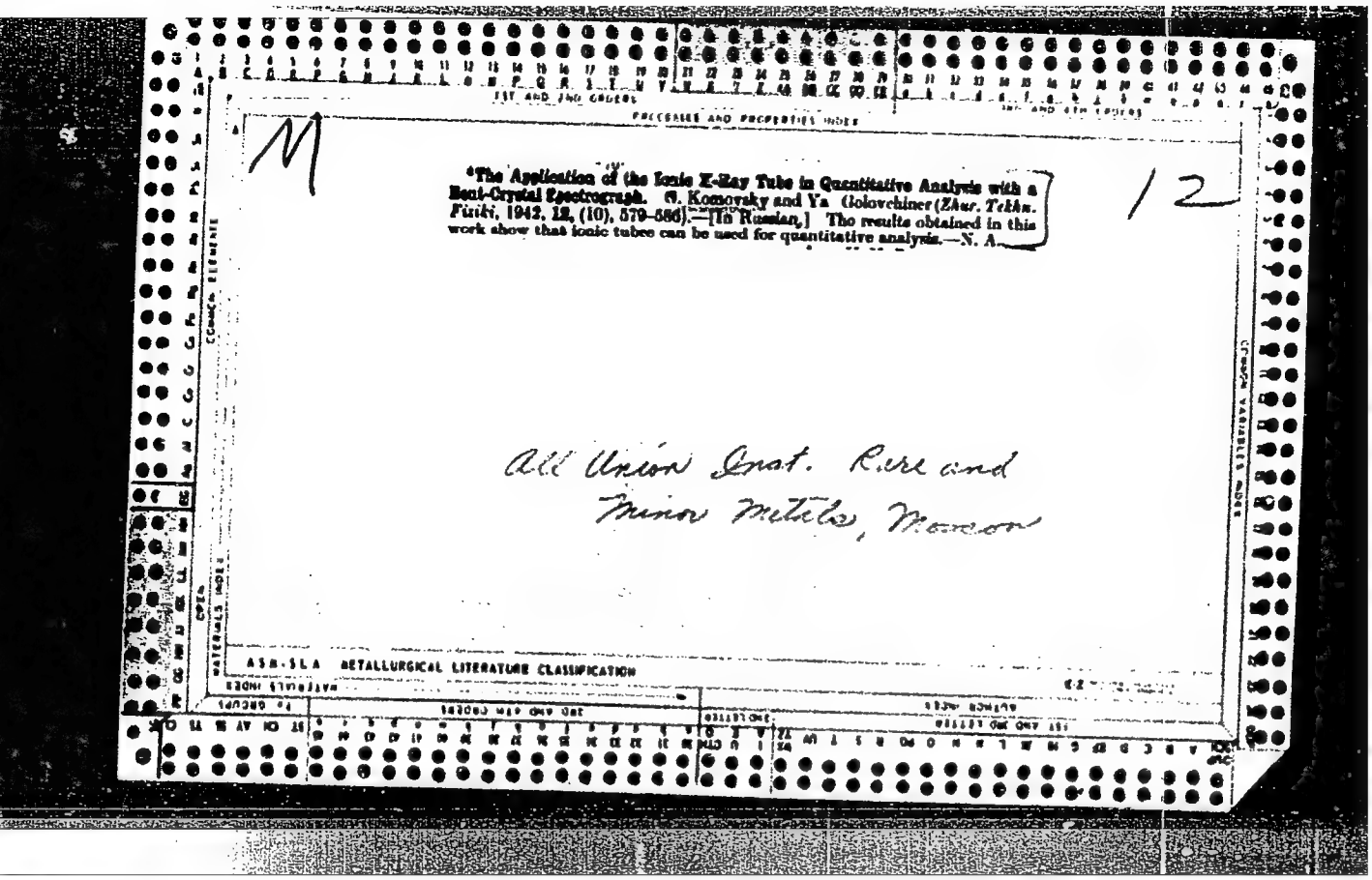
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



M

12

*The Application of the Ionic X-Ray Tube in Quantitative Analysis with a Bent-Crystal Spectrograph. G. Komovsky and Ya Golovchiner (*Zhur. Tekhn. Fiziki*, 1942, 12, (10), 579–586).—[In Russian.] The results obtained in this work show that ionic tubes can be used for quantitative analysis.—N. A.

All Union Inst. Rare and Minor Metals, Moscow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Test of the chemical treatment of nonluminescent materials. G. Komovskii, S. Solodovnik, and O. Lozhnikova (Gorodnet). *Bull. acad. sci. U.R.S.S., Sér. phys.* 9, 395-6(1945).—A method to analyze scheelite and hubnerite is described. Heat 0.5 gr. of the W salt with 5-7 ml. of concd. HCl and a little $SnCl_2$. Evap. the soln. and treat the blue residue with acid again. Add 10% $CaCl_2$ and after drying heat 15 min. at 900-1000°. Place the residue on a slide and observe it with cathode rays. Count the no. of luminescent grains. S. Pakswer

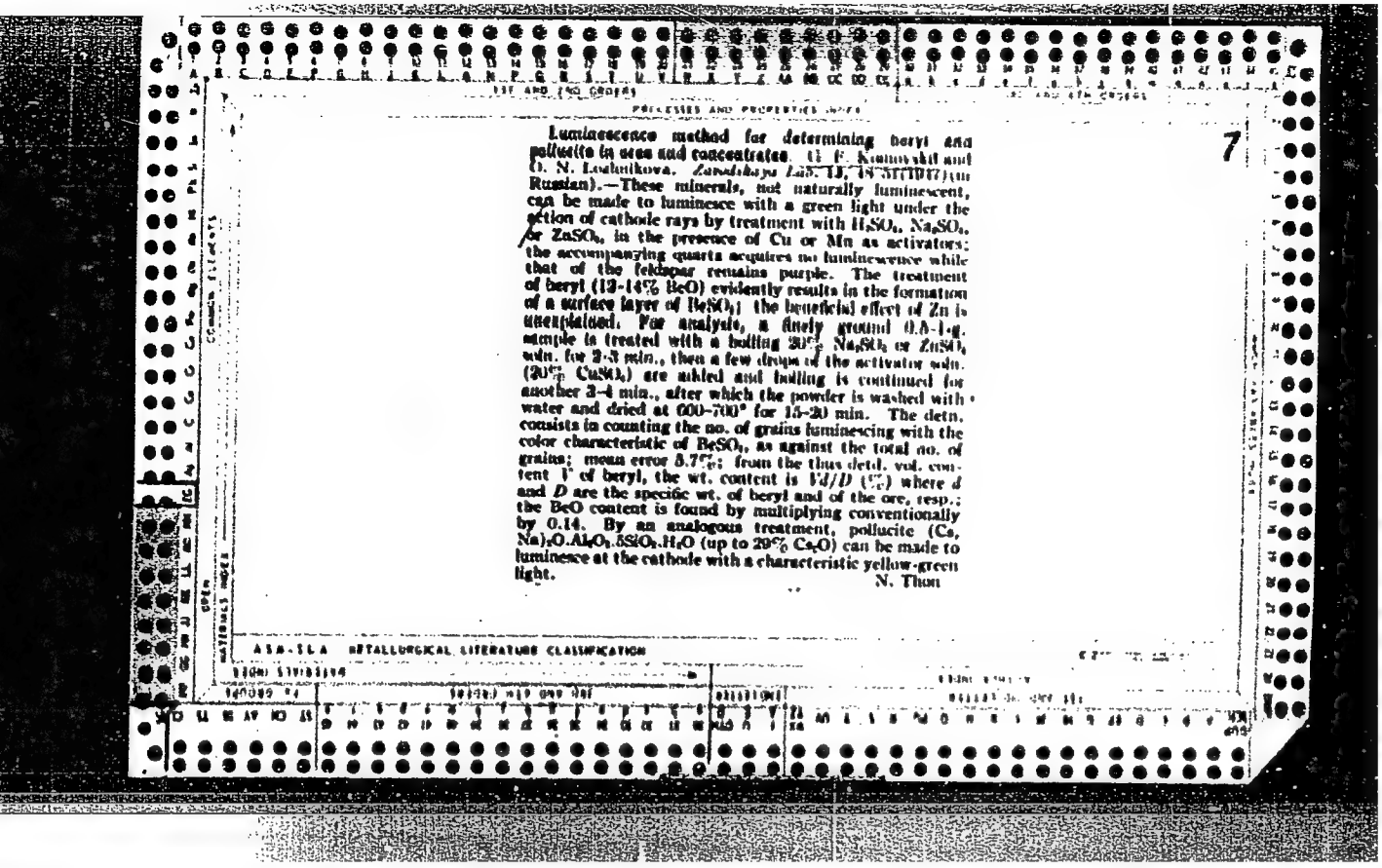
COMMON ELEMENTS

OPEN

MATERIALS INDEX

COMMON VARIABLES INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

7

Luminescence method for determining beryl and pollucite in ores and concentrates. G. F. Kunovskii and O. N. Loshnikova. *Zavodskaya Lab.* 13, 48-51 (1947) (in Russian).—These minerals, not naturally luminescent, can be made to luminesce with a green light under the action of cathode rays by treatment with H_2SO_4, Na_2SO_4, or $ZnSO_4$, in the presence of Cu or Mn as activators; the accompanying quartz acquires no luminescence while that of the feldspar remains purple. The treatment of beryl (13-14% BeO) evidently results in the formation of a surface layer of $BeSO_4$; the beneficial effect of Zn is unexplained. For analysis, a finely ground 0.5-1-g. sample is treated with a boiling 30% Na_2SO_4 or $ZnSO_4$ soln. for 2-3 min., then a few drops of the activator soln. (20% $CuSO_4$) are added and boiling is continued for another 3-4 min., after which the powder is washed with water and dried at 600-700° for 15-20 min. The detn. consists in counting the no. of grains luminescing with the color characteristic of $BeSO_4$, as against the total no. of grains; mean error 5.7%; from the thus detd. vol. content V of beryl, the wt. content is Vd/D (%) where d and D are the specific wt. of beryl and of the ore, resp.; the BeO content is found by multiplying conventionally by 0.14. By an analogous treatment, pollucite $(Cs, Na)_2O.Al_2O_3.5SiO_2.H_2O$ (up to 29% Cs_2O) can be made to luminesce at the cathode with a characteristic yellow-green light.

N. Thon

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

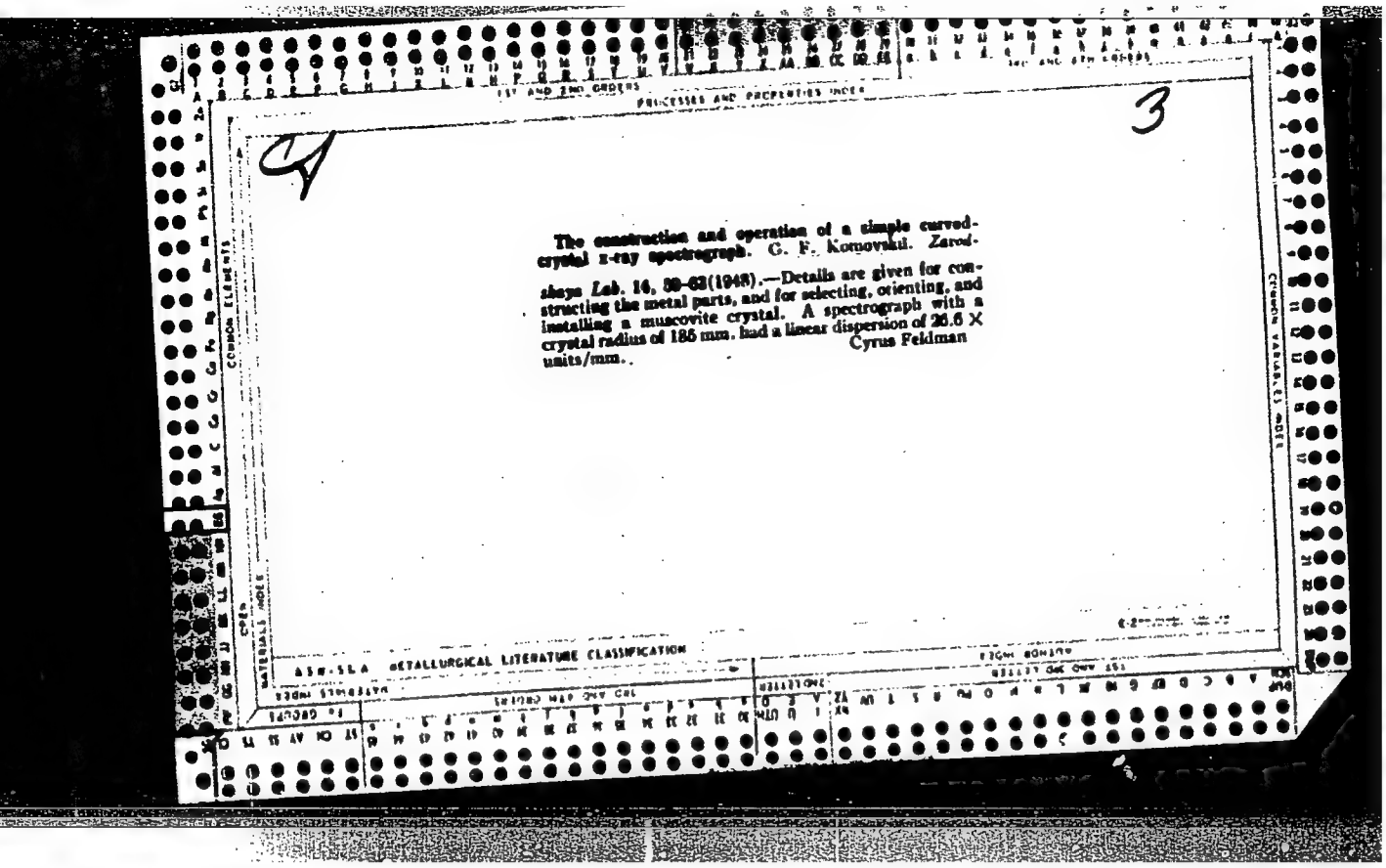
USSR/Electronics Jan 1948
Spectrographs - Manufacture
X-Ray Analysis

"A Simple Model of an X-Ray Spectrograph With a Curved Crystal, and Its Manufacture," G. F. Komovskiy, State Inst Fine and Rare Metals, 5 pp

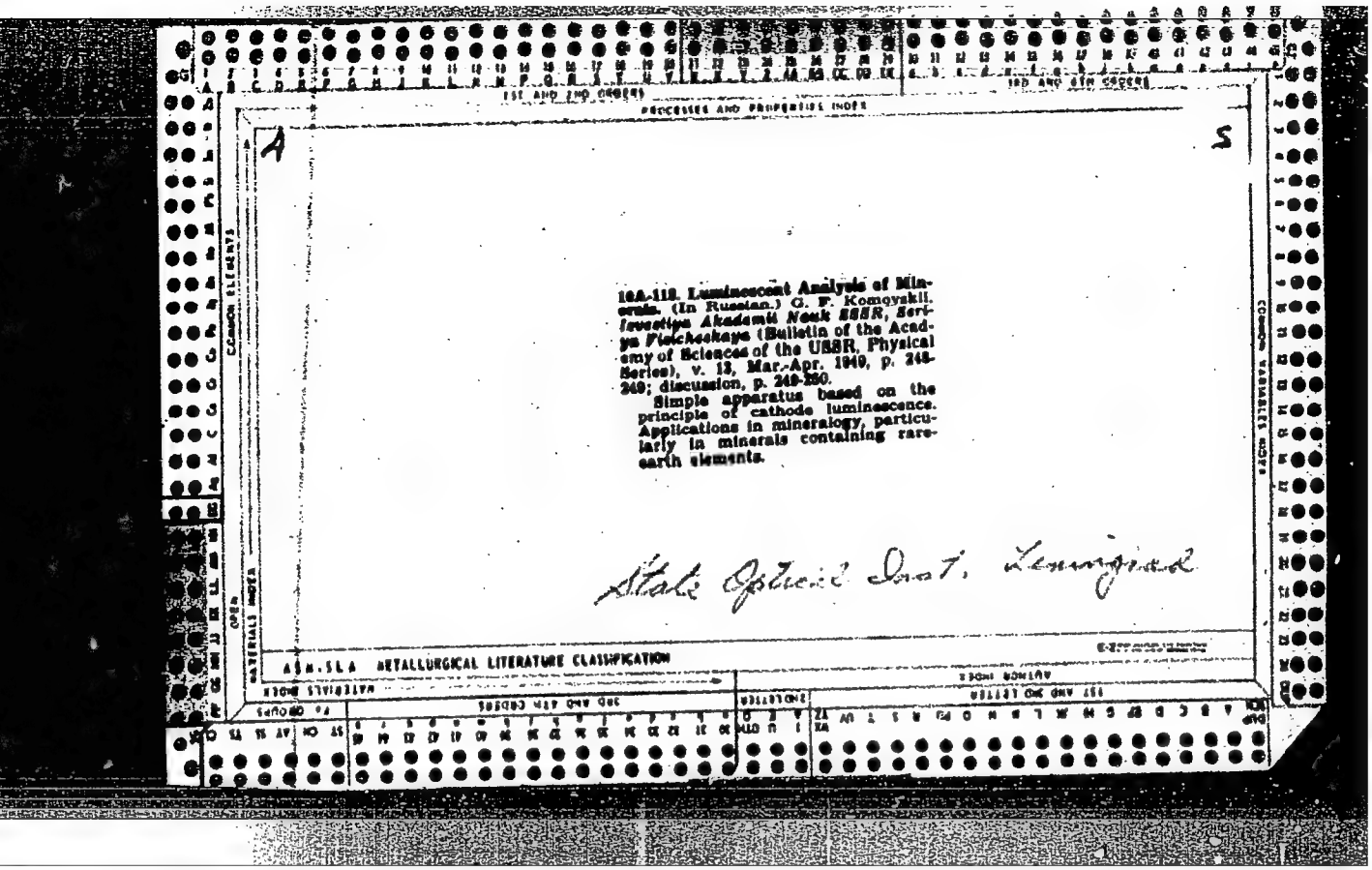
"Zavod Labor" Vol XIV, No 1

Describes an X-ray spectroscope, with a curved crystal, which can be utilized for analyses. Method for preparation of this crystal first suggested by Kosha. Its manufacture is simple, requiring very little lathe processing.

61T30



The construction and operation of a simple curved-crystal x-ray spectrograph. G. F. Komovskii. *Zavodskaya Lab.* 14, 59-62(1948).—Details are given for constructing the metal parts, and for selecting, orienting, and installing a muscovite crystal. A spectrograph with a crystal radius of 185 mm. had a linear dispersion of 26.6 X units/mm.. Cyrus Feldman



10A-118. Luminescent Analysis of Minerals. (In Russian.) G. F. Komoyskii. *Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya* (Bulletin of the Academy of Sciences of the USSR, Physical Series), v. 13, Mar.-Apr. 1949, p. 248-249; discussion, p. 249-250.

Simple apparatus based on the principle of cathode luminescence. Applications in mineralogy, particularly in minerals containing rare-earth elements.

State Optical Inst. Leningrad

KOMOVSKIY, G.F.; LOZHNIKOVA, O.N.; BARSANOV, G.P., red.; VERSTAK, G.V., red.izd.; MALEK, Z.N., tekhn.red.; POPOV, N.D., tekhn.red.

[Luminescence analysis in the study of ores and minerals] Liuminestsentnyi analiz pri izuchenii rud i mineralov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i okhrane nedr, 1954. 90 p. (MIRA 12:1)

(Luminescence) (Mineralogy)

KOMOVSKIY, G.F.

48-5-36/56

SUBJECT: USSR/Luminescence

AUTHORS: Komovskiy G.F., Nikol'skiy V.S. and Lozhnikova O.N.

TITLE: Thermoluminescence of Minerals (Termolyuminestsentsiya mineralov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, pp 711-714 (USSR)

ABSTRACT: Various samples of calcites were investigated with resp. to thermoluminescence. They were subjected to a preliminary irradiation by X-rays by means of an X-ray tube BSV-W yielding approximately 100 r/sec. A photoelectronic multiplier of the FEU-19 type was applied to study the thermo-luminescence of these minerals and to record the curves of its intensity.

The inspection of the curves represented by Fig 1 and 2 in the paper shows that the magnitude of luminescence peaks depends on the time of preliminary irradiation, increasing with time.

The comparison of thermoluminescence curves of the yellow calcite, Fig 1, and the red-violet calcite, Fig 2, shows that the peak of the first curve is considerably higher than that

Card 1/2

AUTHORS: Komovskiy, G. F., Voskresenskaya, L. A. S/032/60/036/03/044/064
B010/B117

TITLE: Application of the Device of the Type URS-50-I to Check the Orientation of Germanium Monocrystals

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol 36, Nr 3, pp 362-363 (USSR)

TEXT: The X-ray equipment of the type URS-50-I was used to determine the orientation of germanium monocrystals, and a monochromatic beam was directed upon the plane surface of the turning monocrystal. Unlike the usual method, only the reflection from a crystallographic face was recorded with the counter tube resting immovable, and the plane sample turning around its vertical axis in the angular interval from 0° to 2 ϑ. A broad beam was applied, and the width of the slit in front of the sample and the height of the counter-tube slit were varied. A special sample holder (Fig) was designed which permits to turn the sample in two directions perpendicular to each other. The measuring technique described may be used for several purposes, but it is not adapted to replace completely the photographic "back-reflection" method. There is 1 figure.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti (State Scientific Research and Planning Institute of the Rare-metal Industry)

Card 1/1

KOMOVSKIY, G.F.

Thermoluminescence of stone meteorites. Meteoritika no.21:64-70 '61. (MIRA 14:11)

(Meteorites) (Luminescence)

KOMOVSKIY, G.F., prof. (Moskva)

Thermoluminescence and age of rocks. Priroda 50 no.5:90-93 My '61. (MIRA 14:5)

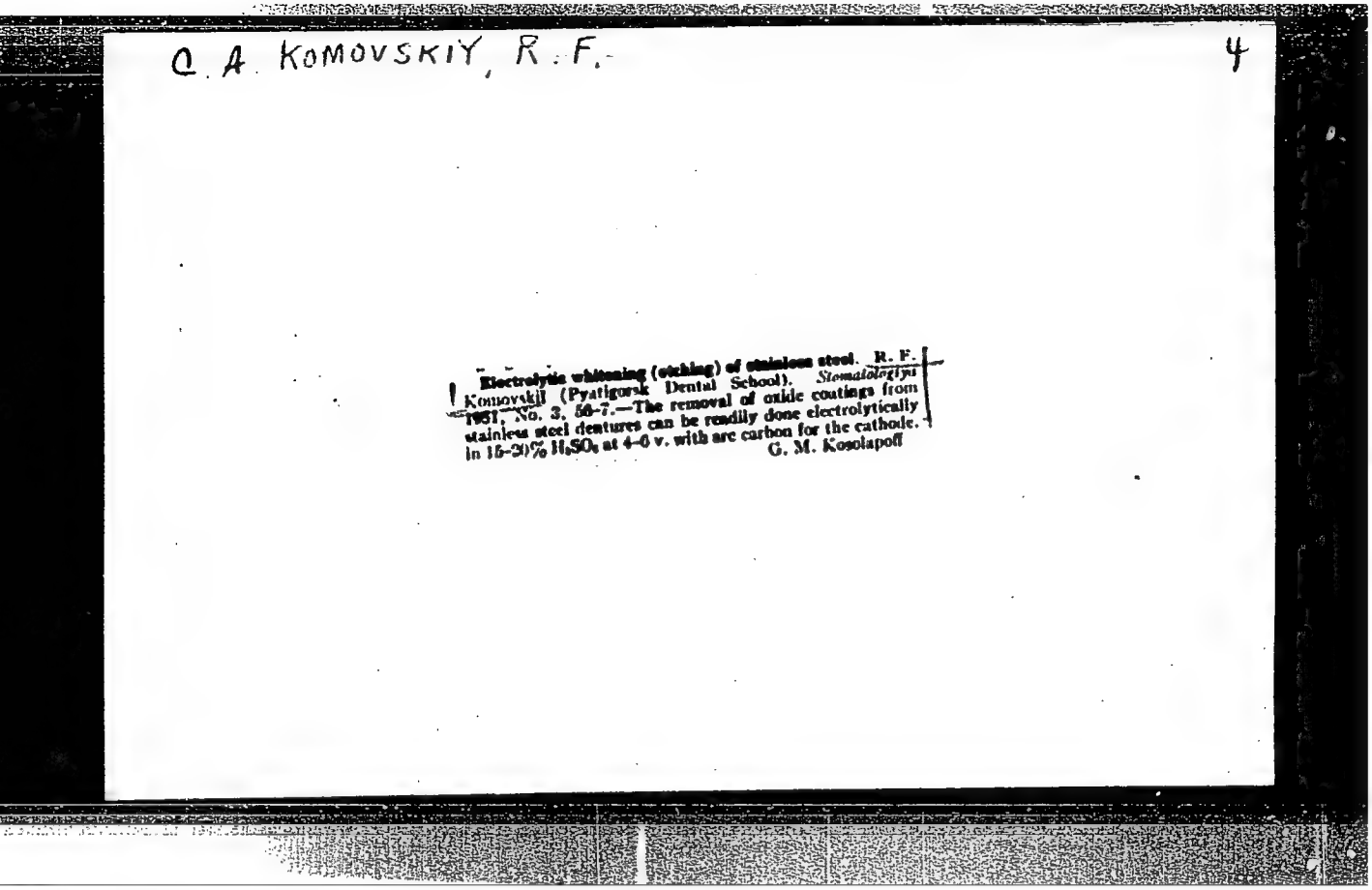
(Geological age) (Rocks)

KOMOVSKIY, G.F., prof. (pos.Planerskoye, Krym)

Mountain crystal. Priroda 51 no.6:115-116
(Planerskoye region--Quartz crystals)

KOMOVSKIY, G.F., prof. (Moskva)

Thermoelectric and photoelectric effect of rocks and minerals.
Priroda 52 no.8:102-104 Ag '63. (MIRA 16:9)
(Rocks—Photoelectric properties)
(Rocks—Thermoelectric properties)



KOMOVSKIY, R. F.

4

Electrolytic whitening (etching) of stainless steel. R. F. Komovskiĭ (Pyatigorsk Dental School). *Stomatologiya* 1951, No. 3, 56-7.—The removal of oxide coatings from stainless steel dentures can be readily done electrolytically in 15-20% H_2SO_4 at 4-6 v. with arc carbon for the cathode. G. M. Kosolapoff

KOLOKOLOV, Mikhail Veniaminovich; KOMOVSKIY, Vadim Romanovich; MON'YAKOV, Nikolay Vasil'yevich; PASHKNTSEV, I.D., red.

[Standardized transistor components for use in the construction of automatic control systems] Tranzistornye unifitsirovannye elementy dlia postroeniia skhem avtomatiki. Leningrad, 1964. 22 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Pribory i elementy avtomatiki, no.4) (MIRA 17:7)

KOMP, Josef, inz.

Coal in the economy of Afganistan. Uhli 4 no.11:391-393 N '62.

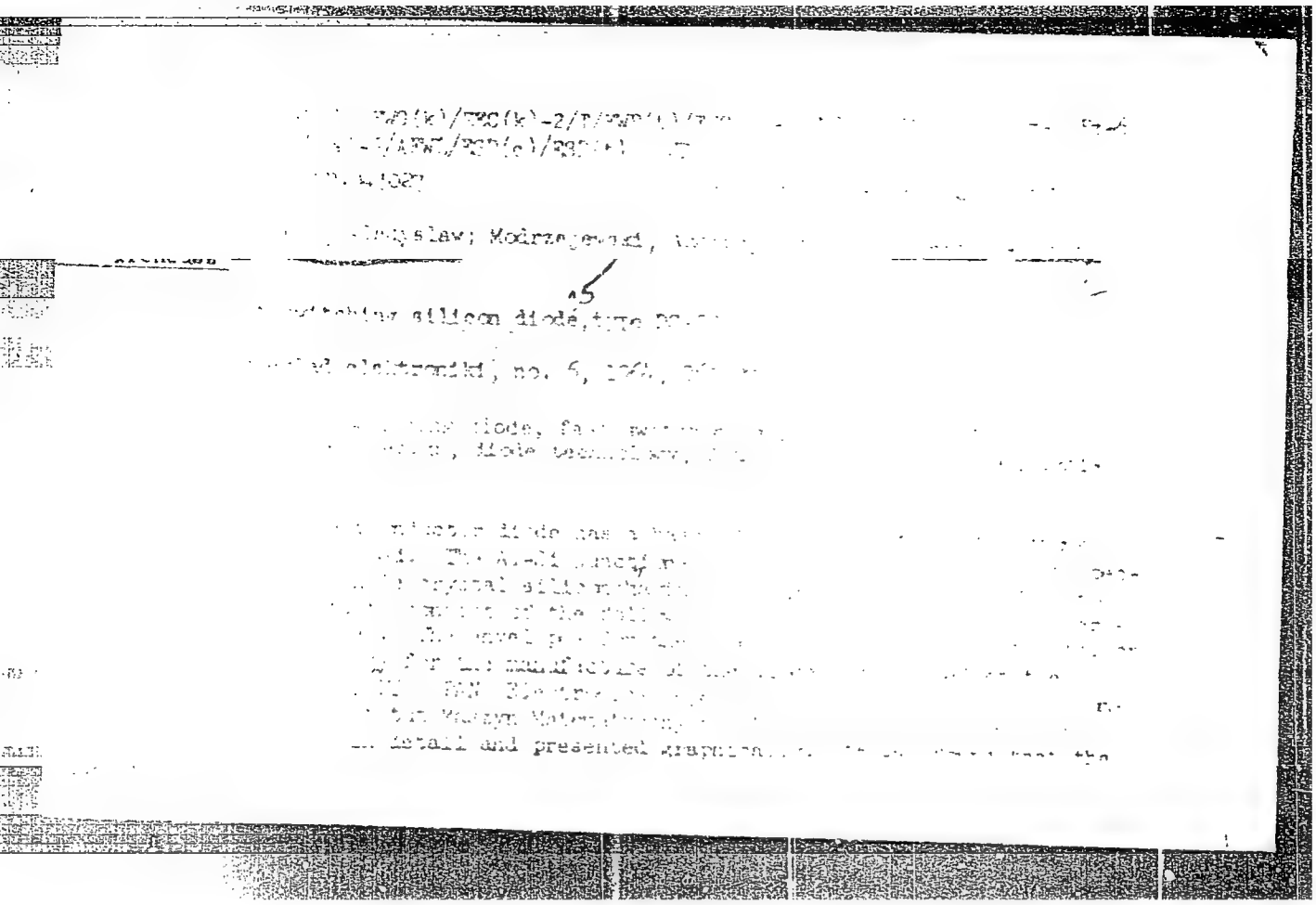
1. Sdruzeni Ostravsko-Karvinskych dolu, Ostrava.

KOMPAKTOR, B. (Budapest)

Some questions relating to the socialist method of industrial management in Hungary. Periodica polytechn chem 4 no.4:335-351 '60. (EEAI 10:5)

1. Kafedra politicheskoy ekonomiki, Politekhnicheskiy universitet, Budapesht.

(Hungary--Industrial management)



[illegible]

[illegible] NR: AP4043027

resist, in the mean, constant tensi[illegible] break [illegible] exceeding [illegible], during [illegible] junctions collapse; [illegible] and 3) pass the torsion test and break only after 10 [illegible] twisting. The waste of diodes due to bursting of the glass envelopes [illegible] amounted to only [illegible] of flameless sealing methods for the glass envelopes. "The [illegible] wish to thank Prof. Dr. Eng. W. Rosinski, Chief of Zaklad Elektroniki [illegible] Podstawowych Problemow Techniki PAN (Electronics [illegible] of the [illegible] Basic Engineering Problems PAN), and Pr. [illegible] Institute for Computers PAN for their permission to publish this [illegible] Orig. art. has: 27 figures.

ASSOCIATION: none

SUBMITTED: 07Feb64 ENCL: 00 SUB CODE: EC

NO REF SOV: 001 OTHER: 009

Card 2/2

KOMPALO, Wladyslaw

The n-p-n alloy junction transistors. Przegl elektroniki 3 no.9:522-528 S '62.

1. Zaklad Elektroniki, Instytut Podstawowych Problemow Techniki, Polska Akademia Nauk, Warszawa.

KOMPAN, A.

KOMPAN, A.

Conditions of visual reception in labor processes. Sots. trud no.2: 74-78 F '58. (MIRA 11:1)

(Eye) (Industrial hygiene)

KOMPAN, A. I.; SATANOVSKIY, A. M.; ERMAN, I. M.; STEZHENSKAYA, YE. I.; BAKALINSKAYA, YE. D.; ZHIRNOVA, G. YE.; ZINCHENKO, V. P.

"Labor Hygiene in the Modern Blast Furnace Industry."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

24888

S/109/61/006/008/008/018
D207/D304

9.4310

AUTHORS: Gribnikov, Z.S., Kompan, V.N., and Svyatogor, L.V.

TITLE: A study of channel effect triodes

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 8, 1961, 1330 - 1341

TEXT: The authors investigate practical methods of obtaining channel effect triodes and analyze their properties. First the theory is briefly discussed as given by W. Shockley (Ref. 1: Proc. I.R.E. 1952, 40, 11, 1365) and by J.B. Gunn (Ref. 6: J. Electronics and Control, 1956, 2, 87). In order to follow the theory with experiments the authors used unipolar n-h-n transistors with a high slope which were prepared by a method, in which the impurity diffusion and etching occur at the same surface. The experimental samples had channel lengths $l \cong 0.025$ cm the perimeter of the channel front being $d \cong 1$ cm. The channel conductivity was $G_0 \cong 0.002$ - 0.005 microns; the cut-off potential V_0 was 15-40V. Thus the satu-

Card 1/3

ration current I_0, the channel thickness a, and the impurity concentration gradient σ in the cross section of the channel, assuming its linear change, could be calculated as

$$I_0 = \frac{2}{5} G_0 V_0, \tag{14}$$

$$a = \frac{3eu_n d}{16\pi l} \frac{V_0}{G_0}, \tag{15}$$

and

$$\mathfrak{G} = \frac{2IG_0}{\dot{q}u_n da^3}. \tag{16}$$

respectivly. Thus a $\cong$ 6 - 10 micro and the concentration gradient is $\simeq 10^{19}$ cm^{-4}. The approximate value of $\mathfrak{G}$ can also be obtained from the evaluating the diffusion process measuring the depth of the f-n junction

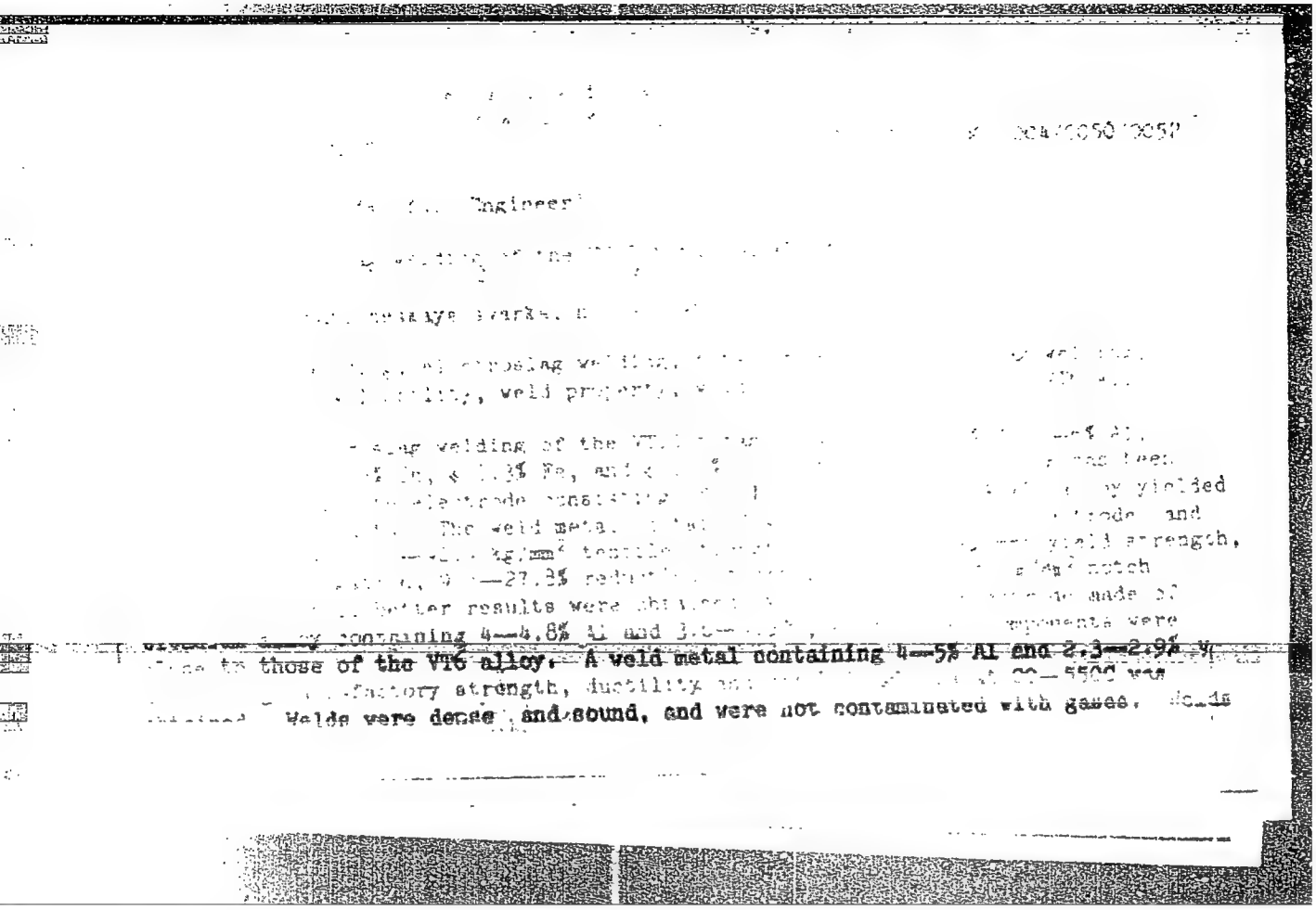
$$\mathfrak{G} = \frac{F(C_0, N_D)}{x_{p,n}}, \tag{17}$$

Card 2/3

where F(Co, π_p), the function of concentration of basic impurity in intrinsic material and of concentration of diffusing impurity Co at the surface. The value of (17) is the same as that of (16), $\sim 10^{19}$ cm^{-4}. Practically all the rest of the article constitutes a discussion of experimental results. In the last part of the article, the authors discuss briefly the use of unipolar channel triodes as phototriodes. The authors acknowledge the helpful criticism of V.A. Fomenko and K.M. Krolevets. There are 12 figures, 2 tables, and 6 non-Soviet-bloc references. The references to the [illegible] recent English-language publications read as follows: G.H. Glover, I.M. Ross, Proc. I.R.E., 1953, 41, 8, 970; G.C. Dacey, [illegible] Ross, Bell System Techn. J. 1955, 34, 6, 1149; R.M. Warner, W.H. Jackson, E.I. Doucette, H.A. Stone, Proc. I.R.E., 1959, 47, 1, 44; J.B. Gunn, J. Electronics and control, 1956, 2, 1, 87.

SUBMITTED: October 27, 1960

Card 3/3



those of the VT6 alloy. A weld metal containing 4—5% Al and 2.3—2.9% Mo
factory strength, ductility
Welds were dense and sound, and were not contaminated with gases.

ACC NR: AP7004201 SOURCE CODE: UR/0125/67/000/001/0065/0068

AUTHOR: Gurevich, S. M.; Kompan, Ya. Yu.

ORG: Electric Welding Institute im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)

TITLE: Electroslag welding of titanium with a consumable electrode guide

SOURCE: Avtomaticheskaya svarka, no. 1, 1967, 65-58

TOPIC TAGS: titanium, titanium alloy, ~~welding~~, titanium welding, ~~titanium alloy welding~~, electroslag welding, consumable electrode, ~~guide welding~~ WELD EVALUATION

ABSTRACT: The possibility of electroslag welding of titanium articles up to 400 mm thick with a consumable electrode guide has been investigated. Large, VT1 titanium forgings (cross section—400 x 1000 mm) were welded by this method under an AN-T2 flux. It was determined that with electrode guides 9—18 mm thick, the gap between forgings (400 mm thick) should be 32 mm, and that one electrode 5 mm in diameter should be used for each 100 mm of thickness. Argon, fed through ducts in the electrode guide directly to the welding area, eliminated almost completely the possibility of contact between molten metal and the atmosphere and resulted in a weld of high

Card 1/2 UDC: 621.791.756:669.295

ACC NR: AP7004201

quality. The plasticity and notch toughness of the weld were lower than those of the parent metal due to the coarsely crystalline structure of the cast weld-metal. The strength of the weld, however, was equal to that of the parent metal. The chemical composition of either the consumable-electrode guide or the electrodes may be varied to achieve the weld composition desired. Eight formulas for calculating their chemical compositions are given. Orig. art. has: 4 figures and 2 tables. [TD]

SUB CODE: 11, 13/ SUBM DATE: 08Feb66/ ORIG REF: 005/ ATD PRESS: 5116

Card 2/2

KOMPAN, Ye.G.; PEVNAYA, I.Yu.; ZAV'YALOV, B.M., red.

[Industrial aesthetics; a bibliography of literature published from 1958 to 1962] Tekhnicheskaia estetika; bibliograficheskii ukazatel' 1958-1962 gg. 1 kv. Kiev, Kievskii dom nauchno-tekhn. propagandy, 1962. 14 p. (MIRA 16:10)

(Bibliography--Aesthetics)
(Bibliography--Human engineering)

KOMFAN, Ye.G.; RUTGAYZER, I.D.; TKACHENKO, V.A., otv. za vypusk; LYSENKO, I.F., red.; CHERNYSHENKO, Ya.T., tekhn. red.

[Use of plastic materials in the machinery manufacture; list of literature (for inventors, efficiency promoters, and innovators of the industry)] Primenenie plastmass v mashinostroenii; katalog literatury (v pomoshch' izobretateliam, ratsionalizatoram i novatoram proizvodstva). Khar'kov, Izd-vo TsBTI Khar'kovskogo SNKh, 1960. 55 p. (MIRA 16:7)

1. Khar'kov. TSentral'naya nauchno-tekhnicheskaya biblioteka. (Plastics) (Machinery industry)

KOMPANEJCEV, Nikola

Comuting stress in rails, taking into consideration the degree of rot in the ties. Zeleznice Jug 20 no.11:21-25 N '64.

KOMPANAJCEV, Nikola (Zagreb)

The KZ rapid computation of railway tracks following the Zimmermann-Diehl method. Gradevinar 14 no.4:118-120 '62.

KOMPANEJCEV, Nikola

New regulations on the expansion of rails. Zeleznice Jug 19 no.6:28-33 Je '63.

KOMPANEJCEV, Nikola

Aluminothermic welding of rails. Zeleznice Jug 19 no.8: 26-31 Ag '63.

KOMPANEJCEV, Nikola (Zagreb)

Modern straightening of the direction of railroad curves. Gradevinar 14 no.12:434-440 D '62.

BLAZHKEVICH, B.I.; KOMPANEITS, L.G.

Use of the theorem of integral residues in the case of a multiple-pole Laplace transform. Avtom.kont.i izm.tekh. no.6:7-10 '62.
(MIRA 16:2)
(Meromorphic functions) (Variational calculus)

KOMPANEJCEV, Nikola

Rectifying the direction of arches by the method of arrows. Zeleznice Jug 18 no.9/10:10-14 '62.

KOMPANEJCEV, Nikola

Current building of curves for the increase of speed. Zeleznice Jug 18 no.11/12:23-26 '62.

GRISHILO, V.F.; FEDORENKO, V.F.; MINDRUL, A.I.; KOMPANETS, G.A.

Production of high-quality chrome leather from hides. Kozh.-obuv. prom. 7 no. 10:29-30 O '65 (MIRA 19:1)

KOMPANETS, G. T. and BESPAL'KO, V. G. (Veterinary Surgeons, Khar'kov Oblast', Linkovatovsk Agricultural Technical College)

"Bicillyn 1 - An effective remedy for lung diseases in swine"

Veterinariya, Vol. 38, no. 10, October 1961, pp. 81-89

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ACC NR: AT5036588 SOURCE CODE: UR/0000/66/000/000/0216/0217

AUTHOR: Komendantov, G. L.; Kompanets, V. S.; Kopanev, V. I.; Poleshchuk, S. I.; Rassolov, N. A.; Chirkin, M. D.

ORG: none

TITLE: Further development of the otolithic theory of motion sickness [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 216-217

TOPIC TAGS: biologic acceleration effect, motion sickness, coriolis acceleration, vestibular analyzer, unconditioned reflex, visual analyzer, central nervous system

ABSTRACT: The otolithic theory of motion sickness (V. I. Voyachek, 1909-1958) is widely recognized. Its basic assumptions are: 1) the universal nature of motion sickness (it can arise during any kind of motion); 2) the summation of reactions (cumulation) as a mechanism of the development of motion sickness; 3) the vestibular, proprioceptive, visual, and cutaneous mechanical receptors participate in the reflex mechanism of motion sickness development during which, the otolithic component of the vestibular analyzer assumes the basic role; 4) the most essential cause of motion sickness is vertical displacements of the human body which address otolithic receptors; 5) the conditioned reflex mechanism of motion sickness is supplementary; 6) the condition of the nervous system plays an important role in the development of motion sickness; 7) various external conditions (high air temperature, smells, etc.) influence the development of motion sickness; 8)

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the resistance of the organism to motion sickness can be built up by repeated exposure to its causative mechanisms (training).

The investigation by the authors led to the establishment of the following: 1) the existence of a phase in the development of motion sickness; 2) a functional fluctuation, the amplitude of which changes as a function of the developmental phase of this condition; 3) an additional mechanism of motion sickness (disrupted systemic function); 4) the development of rocking illusions accompanied by compensatory motor reactions; 5) peculiarities of the course of motion sickness at altitudes of 2000, 3000, 4000, and 5000 m ("elevation" in a pressure chamber); 6) shifts in the excitability and lability of the visual analyzer in the latent form of motion sickness; 7) shifts in atrioventricular conductivity during various phases of motion sickness; 8) the influence of dibasol on the course of the latent form of motion sickness; 9) the inhibition of lifting reflexes (according to EMG data) during the prolonged, standard oscillation of experimental animals and the development of these reactions when the oscillation regimen is altered; and finally, the prospect of applying motion sickness to the discovery of functional insufficiencies, e.g., using conditioned reflex models of motion sickness to reveal statokinetic defects in human subjects. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

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E140/E135

AUTHORS: Blazhkevich, B.I., and Kompaneits, L.G.

TITLE: Application of the theorem of residues to the case of multiple poles of a transform

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut mashynoznavstva i avtomatyky, L'viv. Avtomaticheskiy kontrol' i izmeritel'naya tekhnika. no.6. 1962. 7-10.

TEXT: Normally all poles of a function are required in order to be able to evaluate the function. The contribution of each pole may be found, however, individually applying L'Hopital's rule (in the present paper the Wagner-Carson transform is used). Formulae are given for the case of poles of multiplicities 1,2,3. The complexities of the formulae increase rapidly with the order of the pole, and the authors consider that for higher orders their applicability is questionable.

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KOMPANETS, Ivan Danilovich; KLETCHENKO, A.V., redaktor; VESKOVA, Ye.I., tekhnicheskiy redaktor

[Expansion of animal husbandry in Chernovtsy Province] Zhivotnovodstvo Chernovitskoi oblasti na pod"eme. Moskva, Gos. izd-vo selkhoz. lit-ry, 1955. 39 p. (MLRA 9:11)

1. Sekretar' Chernovitskogo obkoma KP Ukrainy.
(Chernovtsy Province--Stock and stockbreeding)

KOMPANEJCEV, Nikola

Double switches with arched core. Zeleznice Jug 20 no.12:29-31 D '64.

SOV/49-58-8-8/17

AUTHORS: Savarenskiy, Ye.F., Lysenko, L.N. and Kompanets, M.V.

TITLE: Microseisms of Lake Issyk-Kul' as Observed by Seismic Station in Rybach'ye (O mikroseysmakh ozera Issyk-Kul' po nablyudeniyam seysmicheskoy stantsii v Rybach'yem)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr 8, pp 1015 - 1019 (USSR)

ABSTRACT: The seismic station Rybach'ye, situated on the west coast of Lake Issyk-Kul', often receives microseisms lasting a short period. Their magnitude rapidly increases with high winds. An example of a typical seismogram registering the microseisms with a diagram showing the wind velocity is shown in Figure 2.
From theoretical considerations, the amplitude of the microseisms can be determined from Eq.(1). It shows that one of the conditions of the microseisms' formation are the standing waves caused by the water waves. These conditions were observed by the station personnel in the course of three years. The standing waves on the lake were observed to develop as a result of a modulation of the advancing wave and reflected from the shore waves (Figure 1).
From the graph (Figure 3) of the amplitude A, period T

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and wind velocity V , it can be seen that a lag of about 9 hours between a maximum of the amplitude and that of the wind velocity is formed which can be defined as a relation A = kV (Figure 4).
The standing waves caused by the wind depend also on the length of water distance. The relation of the height of water waves H , the velocity of their movement C and the wind stretch F , time of its action t and velocity V was calculated (Figure 6) and compared with the large ocean areas (Figures 5a, b). The results show a close relationship.
The amplitude of microseisms was also compared to that of the ocean by evaluating a formula (T) as defined for the ocean conditions and substituting into it the data obtained from the lake (table). It was found that the observed period, 1-3 secs, did not differ much from the theoretical 1.5-3 secs. The amplitude was defined from Eq.(1) as equal to 1.5-2.0 μ .

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SOV/49-58-8-8/17

Microseisms of Lake Issyk-Kul' as Observed by Seismic Station in Rybach'ye

It is evident from all the data obtained by means of observations and theoretical calculations that the microseisms formed on Lake Issyk-Kul' have a character common to that of the ocean type.
There are 6 figures, 1 table and 5 references, 3 of which are English, 1 Soviet and 1 French.

ASSOCIATION: Akademiya nauk SSSR Institut fiziki Zemli
(Ac.Sc. SSSR, Institute of Terrestrial Physics)

SUBMITTED: March 6, 1958

Card 3/3 1. Microseisms--Mathematical analysis

KOMPANETS, O.M.; DUKAREVICH, A.S.

Preparation of the BK-8 protein blood substitute from dried native bull serum. Trudy Kiev. nauch.-issl. inst. perel. krovi i neotlozh. khir. 3: 129-132 '61. (MIRA 17:10)

1. Kiyevskiy institut perelivaniya krovi.

BABIN, Ye. P.; BORODINA, Z. S.; KOMPANETS, V. A.

Alkylation of toluene by propylene in the presence of $AlCl_2.H_2PO_4$. Zhur. fiz. khim. 36 no.12:2768-2772 D '62. (MIRA 16:1)

1. Institut organicheskoy khimii, Donetskoye otdeleniye, Akademiya nauk UkrSSR.

(Toluene) (Propene) (Catalysts)

KOMPANIYETS, A.

Cargo is flown in containers. Grazhd.av 17 no.3:14 Mr '60. (MIRA 13:6)

1. Nachal'nik sluzhby perevozok Ukrainskogo territorial'nogo upravleniya Grazhdanskogo vozdushnogo flota, Kiyev.
(Aeronautics, Commercial—Freight)
(Containers)

KOMPANEYETS, A.A.

D'YAKONOV, V.K.; DOROSHENKO, N.L.; KOMPANEYETS, A.A.; TSARENKO, A.P., redaktor; VERINA, G.P., tekhnicheskiy redaktor.

[Organizing the work of locomotive crews using job designation time schedules on the Southwestern Railroad Line] Opyt organizatsii raboty lokomotivnykh brigad po imennym raspisaniiam na IUgo-Zapadnoi doroge. Moskva, Gos. transp. zhel-dor. izd-vo, 1954. 75 p. (MLRA 7:12)
(Railroads--Train dispatching) (Locomotives)

DUBININ, Aleksandr Dmitriyevich, KOMPANEYETS, A.A., inzhener, retsenzent; BUTUZOV, A.I., kandidat tekhnicheskikh nauk, redaktor; RUDENSKIY, Ya.V., tekhnicheskiy redaktor

[Mechanics work methods] Priemy slesarnykh rabot. Izd. 2-oe, dop. Kiev, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 190 p. (MLRA 9:8)
(Machine-shop practice)